DOCUMENT RESUME

ED 138 782 08 CE 011 027

AUTHOR	Budke, Wesley E., Comp.; Gordon, Ruth, Comp.
TITLE	Current Projects in Vocational Education-FY 1976. Abstracts of Projects Supported in Fiscal Year 1976 and the Transition Quarter under the Vocational Education Amendments of 1968 (Parts C, D, I and J).
INSTITUTION	Ohio State Univ., Columbus. Center for Vocational Education.
SPONS AGENCY	Bureau of Occupational and Adult Education (DHEW/OE), Washington, D.C. Div. of Research and Demonstration.
PUB DATE	Feb 77
CONTRACT	300-75-0141
NOTE	272p.
EDRS PRICE	MF-$0.83 HC-$14.05 Plus Postage.
DESCRIPTORS	*Abstracts; Bilingual Education; Career Education; *Contracts; Curriculum Development; Demonstration Projects; Educational Research; Elementary Secondary Education; *Federal Aid; *Grants; Post Secondary Education; Program Descriptions; *Research Projects; *Vocational Education
IDENTIFIERS	*Vocational Education Amendments 1968

ABSTRACT

This compilation presents abstracts of 221 new and continuing projects funded by the Division of Research and Demonstration (USOE/BOAE) in fiscal year 1976 and the transition quarter (July 1 - September 30, 1976). Following a narrative introduction and list of project titles, the abstracts are arranged alphabetically by State within each of the four sections that pertain to the part of the Vocational Education Amendments of 1968 under which funding was obtained: Part C, research (124 projects); part D, demonstration (60 projects); part I, curriculum development (15 projects); and Part J, bilingual vocational training (22 projects). The part C projects are grouped according to the following priority areas: Adult vocational education, postsecondary vocational education, individualization and modularization of instructional materials, special needs populations, and special projects of national significance; part D projects by experience-based career education, cluster projects, work experience and cooperative vocational education, and continuing K-14 career education and cluster projects. The information provided for each project includes application number, contract or grant number, title, principal investigator and organization, funding period, and an abstract summarizing project objectives, procedures, and expected contribution to education. The projects are indexed by application number, principal investigator, and State. (Author)

Documents acquired by ERIC include many informal unpublished materials not available from other sources. ERIC makes every effort to obtain the best copy available. Nevertheless, items of marginal reproducibility are often encountered and this affects the quality of the microfiche and hardcopy reproductions ERIC makes available via the ERIC Document Reproduction Service (EDRS). EDRS is not responsible for the quality of the original document. Reproductions supplied by EDRS are the best that can be made from the original.

ED138782

CURRENT PROJECTS IN VOCATIONAL EDUCATION-FY 1976

ABSTRACTS OF PROJECTS SUPPORTED IN FISCAL YEAR 1976 AND THE TRANSITION QUARTER UNDER THE VOCATIONAL EDUCATION AMENDMENTS OF 1968 (PARTS C, D, I AND J)

Compiled By

Wesley E. Budke
Ruth Gordon

U S DEPARTMENT OF HEALTH.
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

The Center for Vocational Education
The Ohio State University
1960 Kenny Road
Columbus, Ohio 43210

February 1977

CE 011 027

This publication was prepared pursuant to a contract (No. 300-75-0141) with the Bureau of Occupational and Adult Education, U.S. Department of Health, Education, and Welfare. Contractors undertaking such projects under government sponsorship are encouraged to express fully their judgment in professional and technical matters. Points of view or opinions do not, therefore, necessarily represent official Bureau of Occupational and Adult Education position or policy.

ABSTRACT

This compilation presents abstracts of 221 new and continuing projects funded by the Division of Research and Demonstration (USOE/BOAE) in fiscal year 1976 and the transition quarter (July 1 - September 30, 1976). Following a narrative introduction and list of project titles, the abstracts are arranged alphabetically by state within each of the four sections that pertain to the part of the Vocational Education Amendments of 1968 under which funding was obtained: Part C, research (124 projects); Part D, demonstration (60 projects); Part I, curriculum development (15 projects); and Part J, bilingual vocational training (22 projects). The Part C projects are grouped according to the following priority areas: adult vocational education, postsecondary vocational education, individualization and modularization of instructional materials, special needs populations, and special projects of national significance; Part D projects by experience-based career education, cluster projects, work experience and cooperative vocational education, and continuing K-14 career education and cluster projects. The information provided for each project includes application number, contract or grant number, title, principal investigator and organization, funding period, and an abstract summarizing project objectives, procedures, and expected contribution to education. The projects are indexed by application number, principal investigator, and state.

FOREWORD

It is important that educators be aware of ongoing vocational education research and development to reduce duplication of activities and facilitate incorporation of innovations into programs. The Center for Vocational Education, through the AIM/ARM project, is pleased to have assisted in disseminating such information by compiling this catalog of abstracts of current projects in vocational education. It presents a record of research and development activities during fiscal year 1976 and the transition quarter, and provides vocational education researchers, program planners, curriculum developers, evaluators, teacher educators, counselors, teachers, and administrators with an easy-to-use compendium of projects in progress.

We wish to thank the Bureau of Occupational and Adult Education staff for assisting in identifying projects and providing information, and the many project directors whose abstracts and/or proposals were essential for preparation of the catalog.

The following Center staff were recognized for their efforts in compiling the catalog: Wesley E. Budke, Project Director; Ruth Gordon, Technical Assistant; and Michele Whetzel, Typist. Abstracting assistance was provided by Dessie Page, Specialist and Janet Thorngate, Technical Assistant.

Robert E. Taylor, Director
The Center for Vocational Education

TABLE OF CONTENTS

Page

ABSTRACT . . . . *i*

FOREWORD . . . . *iii*

INTRODUCTION . . . . *vii*

LIST OF PROJECT TITLES . . . . *xi*

PROJECTS SUMMARY 1

PART C PROJECTS THAT RECEIVED FUNDING DURING THE TRANSITION QUARTER 3

ABSTRACTS OF FUNDED PROJECTS 5

Part C. RESEARCH
- Adult Vocational Education 7
- Postsecondary Vocational Education 31
- Individualization and Modularization of Instructional Materials 69
- Special Needs Populations 87
- Special Projects 117

Part D. DEMONSTRATION
- Experience-Based Career Education 143
- Cluster Projects 175
- Work Experience and Cooperative Vocational Education 185
- K-14 Career Education (Continuations) 195
- Cluster Projects (Continuations) 201

Part I. CURRICULUM DEVELOPMENT 215

Part J. BILINGUAL VOCATIONAL TRAINING 231

INDEXES 255

- APPLICATION NUMBER 257
- PRINCIPAL INVESTIGATOR 263
- STATE 269

INTRODUCTION

Division of Research and Demonstration

The mission of the Division of Research and Demonstration (DRD) is to provide leadership to the vocational education community, to administer national discretionary programs, to stimulate and sustain quality in vocational education, to contribute to the solution of problems in vocational education, and to provide equal access and opportunity to all. The national significance of the programs for which DRD is responsible involves the establishment of a delivery system for innovation and change in vocational education, an inherent part of which is recognition of emerging and changing issues and involves risk taking. The marketing and distribution of products resulting from DRD research and development programs which are developed in accordance with high standards of quality contribute to the improvement of vocational education programs in the States and territories as well as in other sections including the Bureau of Adult Education (BOAE), the vocational education R&D community, and professional organizations.

Research Branch

The Research Branch is responsible for administering the U.S. Commissioner of Education's discretionary vocational education research program, authorized by Section 131(a) of Part C of the Vocational Education Amendments of 1968. Half of the funds appropriated for Part C are given directly to the States and territories on a formula basis for their discretionary use. The States' half of the appropriated funds may be used to support up to 75 percent of the cost of Research Coordinating Units and up to 90 percent of the cost of the projects. The fiscal year of 1976 appropriation for the State grant portion of Part C was $9,000,000.

The portion for the Commissioner of Education's discretionary funding may be used to make grants and contracts for supporting applied and developmental studies, as well as curriculum development, demonstration, evaluations, and dissemination. The Commissioner's fiscal year 1976 appropriation was $11,202,975 including a special authorization for the transition quarter. Of this amount $2,031,108 was used by the Commissioner to support special project efforts of national significance.

The priority areas which the Commissioner's fiscal year 1976 appropriations were to address were announced in the November 10, 1975 issue of the *Federal Register* as follows:

1) Adult vocational education which includes access to vocational education by employees, competency-based adult vocational education, and vocational education in entrepreneurship.

2) Postsecondary vocational education in the areas of modularization or individualization of vocational education programs in new and emerging areas; development and evaluation of programs that serve the needs of students in inner city and/or rural areas; identification and evaluation of exemplary programs that reduce the dropout rate from vocational education at the postsecondary level; development and/or evaluation of cooperative agreements between public, private, and proprietary postsecondary institutions and business, industry, and labor; and development and field testing of criteria, instruments, and procedures to assess productivity and impact of postsecondary vocational education programs.
3) Individualization and modularization of instructional materials including development of materials for use with a specific technology oriented delivery system and field testing and evaluation of the materials.
4) Special needs populations including those requiring bilingual vocational education, those in correctional institutions, migrants, and handicapped.

A total of 100 projects were sponsored under these four priority areas: adult vocational education (21 projects), postsecondary vocational education (36 projects), individualization and modularization of instructional materials (16 projects), and special needs populations (27 projects). An additional 24 efforts were funded as special projects for improving vocational education, several of which were procured by formally advertising for bids in the *Commerce Business Daily.*

Eighteen projects received funding during the transition quarter: two in the adult vocational education priority area, five postsecondary vocational education projects, four from the special needs population area, and seven special projects.

Demonstration Branch

The Demonstration Branch is responsible for administering the U.S. Commissioner of Education's discretionary vocational education demonstration program authorized by Section 142(c) of Part D of the Vocational Education Amendments of 1968. Half of the funds appropriated for Part D are given directly to the States and territories on a formula basis for their discretionary use. The fiscal year 1976 appropriation for the State grant portion of Part D was $8,000,000, with an additional $2,000,000 for the transition quarter.

The portion for the Commissioner of Education's discretionary FY 1976 funding, $8,000,000, may be used to make grants and contracts for purposes of stimulating, through Federal financial support, new ways to create a bridge between school and earning a living for young people, who are still in school, who have left school either by graduation or by dropping out, or who are in postsecondary programs of vocational preparation.

The priority programs which the Commissioner's fiscal year 1976 appropriations were to address were announced in the November 13, 1975 issue of the *Federal Register* as follows:

1) Program Priority I - Demonstration of the National Institute of Education's (NIE's) Experience-Based Career Education (EBCE) Program.
2) Program Priority II - The further development and demonstration of the instructional strategies, methods, and techniques of the National Institute of Education's EBCE program in conjunction with an in-school cluster structure designed for occupational exploration and initial job preparation.
3) Program Priority III - The further development and demonstration of the instructional strategies, methods, and techniques of the National Institute of Education's Experience-Based Career Education Program in expanded, improved, or newly developed cooperative vocational education and work experience programs, excluding Work Study Programs funded under Part H of the Vocational Education Act, Public Law 90-576.

A total of 45 projects were sponsored under these three priority areas: Priority I (30 projects), Priority II (7 projects), and Priority III (8 projects). An additional 15 projects are continuations of career education and cluster projects initially funded in 1974 and 1975.

The Demonstration Branch is also responsible for administering the Commissioner's discretionary bilingual vocational training program, authorized by Section 194(a) of Part J of the Vocational Education Act as added by Section 841(a)(7) of the Education Amendments of 1974, Public Law 93-380. The fiscal year 1976 appropriation for Part J was $2.8 million.

The priority areas which the Commissioner's fiscal year 1976 appropriations were to address were announced in the January 15, 1976 issue of the *Federal Register* as follows: Priority will be given to bilingual vocational training programs or projects which:

1) Serve persons who are unable to secure gainful employment suited to their needs, interests, and abilities because they are of limited English-speaking ability.
2) Serve persons who have left or completed elementary or secondary school.
3) Provide training which will increase trainees' opportunities for acquiring skilled employment.

A total of 22 projects were funded in FY 1976. The 22 Part J projects are located in eight States and train some 1,850 persons. Languages in the projects include Spanish, Chinese, French, Vietnamese, Russian, Indian, and Eskimo. Seven of the projects are located in community-based agencies, six in community colleges, four in institutions of higher education, three in local education agencies, and two in vocational technical schools.

Training is offered for a number of job titles including bilingual secretaries, mental health technicians, agricultural workers, geriatric aides, auto mechanics, machinists, emergency medical technicians, home heating repair persons, welders, house framers, data processors, dental assistants, workers in native arts and crafts, graphic designers, professional chefs, para-legal aides, para-accounting aides, health assistants, food service workers, printers, sewing machine operators, sewing machine repair persons, radio and television repair persons, butchers, meat cutters, slaughterers, and office machine repair persons.

Curriculum Development Branch

The Curriculum Development Branch administers the U.S. Commissioner of Education's discretionary vocational education curriculum development program, authorized by Section 191(a) of Part I of the Vocational Education Amendments of 1968. The Commissioner is authorized to make grants to or contracts with colleges and universities, State boards, and other public or nonprofit private agencies and institutions for curriculum development in vocational and technical education. No matching funds are required. The appropriation for FY 1976 was $1,000,000.

The Curriculum Development Program provides for the development and dissemination of vocational education curriculum materials for use in teaching occupational subjects, including curriculums for new and changing occupational fields. It further provides for: developing standards for curriculum development in all occupational fields; coordinating the efforts of the States with respect to curriculum development and management; surveying curriculum materials produced by other agencies; evaluating vocational-technical education curriculum materials; and training personnel in curriculum development.

Major curriculum projects funded in FY 1976, through competitive contracts announced in the *Commerce Business Daily*, were for the development of a nuclear reactor operator technician (trainee) curriculum of 15 courses in modular form for use in postsecondary training programs and industry training programs; a proposed design and broad content outlines for teacher and professional educator materials for clusters of occupations in the field of marketing and distribution; and a teacher's resource guide and a guidance counselor's manual for the vocational preparation of gifted and talented students in secondary and postsecondary education. In addition, contracts were let for the modification of 10 public service occupations films for use on educational television.

Six curriculum coordination centers were funded through grant competitions announced in the *Federal Register*. Two centers received grants for a 3-year period and four received continuation grants. The six curriculum centers form a National network for the purpose of facilitating State curriculum development efforts and services. Coordination is achieved through State curriculum liaison representatives.

LIST OF PROJECT TITLES

Page

PART C. RESEARCH

Adult Vocational Education

Performance-Based Adult Vocational Education 9

A Model for Vocational Education Program Development in Entrepreneurship 10

Adult Education for Women's Entrepreneurship: Womens' Ownership Workshop 11

Competency Based Adult Vocational Education Through Performance Based Vocational Teacher Education - An Implementation Delivery System 12

Characteristics and Cases of Joint Industry-Education Programs Assisting Employee-Selected Career Changes 13

Entrepreneurship Education for Adults-Program Development and Implementation 14

A Cooperative Vocational Education Investigation to Develop In-Service Training Programs for Operating Supervisory Personnel 15

Personnel Development for Entrepreneurs 16

Expanding Competency-Based Adult Vocational Education in Nevada 17

Career Planning Programs for Women Employees 18

Identification and Analysis of Competency-Based Adult Vocational Education Programs 19

Instructional Materials for Adult Entrepreneurship of Apparel Shops 20

Individualized Employee Training for Small Rural Businesses 21

Development and Field Test of a Multi-Purpose Computerized Vocational Counseling Program for Providing Placement, Occupational and Educational Information to Unemployed Adults, Handicapped Persons and Inmates in Correctional Institutions 22

Page
Developing Adult Guidance-Placement Models in Vermont 23

Developing Competency-Based Individualized Instruction Modules for Owner-Managers of Small Business Firms 24

Analysis of the Relationship of Vocational Education to Women's Entry and Retention into Apprenticeship Programs 25

Assessment of Adult Vocational Outreach Programs of Community Colleges in the Pacific Northwest (DHEW Region X) 26

Development of a Curriculum for Upgrading Mine Electricians on the Use of Solid-State Electrical Controls 27

Development of a Competency-Based Curriculum for Upgrading Water Treatment Technicians 28

Development of Guidance and Counseling Program in Vocational Education for Employed Adults on Wind River Reservation . . 29

Postsecondary Vocational Education

Computer-assisted Guidance: An Individualized Counseling System 33

The Effect of Alternative Career Decision-Making Strategies on the Quality of Resulting Decisions 34

Building a Model for the Linkage and Coordination of Vocational Education at Post Secondary Schools and Business, Industry, and Labor 35

Research and Design Project for Disadvantaged Student Programs 36

Adult Vocational Education Research and Related Activities . . . 37

Project for Awarding College Credit for In-Service Training in Business and Industry 38

Development of Procedures and Instruments for Assessing the Productivity and Impact of Post-Secondary Cooperative Education and Work Experience Programs 39

Proprietary Education: Alternatives for Public Policy and Financial Support 40

Page

The Special Vocational Education Needs of Women 41

Identification of Exemplary Programs that Reduce the Dropout Rate from Vocational Education at the Post-Secondary Level 42

Identification and Development of Competency-Based Curriculum for Water and Wastewater Program 43

Common Intra-Cluster Competencies Needed in a Selected Occupational Cluster 44

The Research, Development and Testing of a Competency-Based System of Instruction for Four Post-Secondary Agriculture Technology Programs in Kansas 45

Development of Methods and Procedures to Identify and Adapt Technical Positions and Curriculum to Meet Industry Needs 46

PROUD OPTION: Research in Support of Vocational Opportunities for Students Leaving Institutions 47

Cooperative Rural Career Guidance System 48

Development, Implementation, and Evaluation of an Innovative Health Education Assistant Program 49

A Procedure for Planning and Evaluating Senior High School Vocational Education Programs--Phase III (Project S.P.A.C.E.--Student Placement and Counseling Effort) 50

Individualization of Instructional Materials 51

Develop and Field Test Criteria, Instruments, and Procedures to Evaluate Vocational Educational Programs in Metropolitan Community Colleges of Kansas City, Missouri 52

Develop and Mediate 72 Modules and Develop Capability To Reproduce and Distribute Mediated Materials 53

A Study of the Comparison of the Benefits of Secondary and Post-Secondary Vocational Education 54

Ocean County Vocational Technical Schools/Ocean County College Articulation Plan for Career Development 55

Page

Feasibility of Developing Post High School Technical Training Programs for Emerging Energy Sources in the Southwestern United States 56

An Empirical Study of Decisions Involving Post-Secondary Vocational School Training 57

A Model of Articulated Counseling Services for Post Secondary Programs 58

Development and Validation of Competency Based Instructional Systems for Adult, Post Secondary, Special Needs, and Entrepreneurship via the IDECC System 59

Cooperative Rural Career Guidance System 60

Entrepreneurship for Post-Secondary Institutions 61

Competency Based Curricula Development for the Mining and Related Industries 62

Vocational Education Module. Rhode Island Educational Management Information System 63

South Dakota Vocational Education Follow-up 64

Installation and Assimilation of Educational Innovations in Vocationa/Technical Programs 65

An Analysis of the Participation of Women in Training for Non-Traditional Occupations in Area Vocational Technical Schools, and Factors Which Influenced Their Decision to Enter and Remain in Such Training: Phase II, Secondary Schools 66

The Systems Approach to Assessment & Evaluation of Post Secondary Vocational Education Programs 67

Study of the Characteristics on Employment Needs in the Drug and Pharmaceutical Industry in the Arecibo-Manati Area of Puerto Rico 68

Individualization and Modularization of Instructional Materials

A Feasibility Study for Providing an Array of Vocational Modules for Individualized Vocational Education for Each Student in a Navajo Tribal-Operated Community School 71

Page

The Delivery and Field Testing of a Computer Managed Delivery System for Multioccupational Programs in Vocational Education 72

Development and Validation of a Competency-Based Preservice/Inservice Learning System for Vocational Teachers in the Implementation and Management of a Curriculum Delivery System for Individualizing Vocational Education 73

The Development, Field Testing and Evaluation of Individualized Instruction Programs in Selected Vocational Occupations 74

Research in Individualized Vocational Education Programs for Small, Isolated, Rural Schools 75

An Individualized Model for a Differentiated Secretarial Single Skills Lab 76

Assessment of an Individual's Job Related Skills and Knowledges 77

Development and Field Testing of Individualized and Modularized Instructional Materials for Vocational Education 78

A Project to Develop Performance-Based Instruction Through Task Analysis and In-Service Programs 79

Individualized Modularized Vocational Education Incorporating Multiple Learning Strategies 80

Alternative Approaches to Individualization in Vocational Education 81

Cooperative Research and Development of Curriculum in Applied Vocational English and Math 82

Instructional Support System for Occupational Education (ISSOE) 83

Individualization and Modularization of Office Occupations and Trades and Industry Materials 84

Modularizing Instructional Materials Using Applications of Technical Concepts 85

Development of Learning Modules for Machine Shop Occupations 86

Page

Special Needs Populations

Multivariate Analysis of the Bilingual Vocational Education Program 89

Overcoming Barriers to Mainstreaming: A Problem-Solving Approach 90

Teaching Job Survival Skills to Youthful Offenders: A Needs-Assessment and Curriculum Development Project 91

Career Aspiration and Self-Congruence in the Education of Puerto Rican Youth 92

Research and Development of Instructional Booklets for Vocational Educators for Mainstreaming the Handicapped . . 93

Vocational Rehabilitation of the Hearing Impaired Mentally Retarded (HIMR) 94

Development of a System for Identification and Assessment of Special Needs Learners 95

A Research and Development Project to Analyze Existing Barriers, Forecast Potential Problem Areas, and Prescribe Professional Development Solutions to Mainstreaming Handicapped Students into Vocational Education Programs 96

Bilingual Bicultural Instructional Resources for Vocational Education/Training in Human Services 97

Bilingual Metric Education Modules for Postsecondary and Adult Vocational Education 98

Development of a Plan to Provide Vocational Education Services to Youth under the Custody of the Massachusetts Department of Youth Services 99

Development and Testing of Criteria for the Identification and Selection of Mentally Handicapped Students for Vocational Programs 100

A Project to Design and Develop a Comprehensive Master Plan for Vocational Education in the Correctional Institutions of Missouri 101

Vocational and Bilingual Education Curriculum Development: A Cooperative Effort 102

Page

Vocational Education and Corrections: An Assessment of Opportunities and Needs 103

Mainstreaming the Handicapped in Preparatory Occupational Education Programs in North Carolina 104

Vocational Education in Correctional Institutions: State-of-the-Art Assessment of Programs in Region IV 105

A Study of Vocational Education in Ohio Correctional Institutions 106

A National Study of Vocational Education in Corrections 107

Correctional Vocational Education Research 108

A Home-Language Free Adult Pre-Vocational and Audio-Visual Course in English-as-a-Second Language 109

Labor Market Effects of Occupational Education Programs for the Physically Handicapped 110

The Quality and Results of Vocational Education in Correctional Institutions 111

A Study of the Acquisition of Vocational Concepts by Bilingual Students in Vocational Education Programs 112

Developing Program Models and Prototype Training Materials to Meet Occupational Training Needs of Adult Women Offenders from a Correctional Institution 113

The Development, Assessment and Dissemination of an Administrative Policy Manual for the Vocational Education of the Handicapped 114

Program Evaluation and Planning: Evaluating Current Vocational Programs and Identifying Handicapped Students and Their Vocational Needs for 1977-1982 115

Special Projects

Project Baseline: A National Study of Vocational Education . . 119

A National Study of State and Outlying Area Statutes Influencing Vocational Education that Possibly Prevent Public Schools from Using Private Training Resources . . . 120

Dimensions of Women's Employment in Nontraditional Occupations . 121

Page

Training Materials on Eliminating Sex Role Stereotyping in Vocational Education 122

Institute for Minority Business Education 123

A Study of Exemplary Cooperation Between Institutions Providing Postsecondary Non-Baccalaureate Occupational Education 124

Business and Management Education Program for Minority Women . . 12[illegible]

Public Vocational Education Information Assistance at the State Level 126

Monitorship of Project Baseline 127

Development of School-to-Work Job Placement Curriculum 128

A Model for Determining the Added Cost of Vocational Education 129

Minority Business Ownership and Management: A Pilot Education and Training Program for Persons in Georgia Correctional Institutions 130

Survey to Update Definitions of Vocational Education Programs for Revising the Document *Vocational Education and Occupations* 131

The Development of Sample Designs for the Follow-up of Vocational Education Graduates 132

National Information System for Occupational and Adult Education 133

Process Assessment of MERC 134

Guidelines for Non-Sexist Vocational Education Materials 135

Minority Enterprise Program for the Fashion Industry 136

AIM/ARM: Abstracts of Instructional and Research Materials in Vocational and Technical Education 137

A State Management Information System Needs Study and a National Needs Assessment of Career Guidance 138

Identifying and Validating Essential Competencies Needed for Entry and Advancement in Major Agriculture and Agribusiness Occupations 139

Page

Minority Business Ownership and Management: A Pilot Education and Training Program for Persons in South Carolina Correctional Institutions 140

Career Awareness and Minority Business Enterprise and Management, High School Level 141

Develop a Model to Recruit and Retrain Women Teachers to Teach in Male Intensive Occupational Programs 142

PART D. DEMONSTRATION

Experience-Based Career Education

Implementation of Experience-Based Career Education 145

Demonstration of NIE's Experience-Based Career Education Program 146

Experience-Based Career Education (EBCE) 147

An Experience-Based Career Education Program for Students in the Comprehensive High Schools 148

Demonstration of the National Institute of Education's Experience-Based Career Education 149

Holomua Project 150

Experience-Based Career Education Implementation and Demonstration Project 151

Illinois Experience-Based Career Education Project 152

An Experience-Based Career Education Project for a League of Secondary Schools in Merged Area V, State of Iowa . . . 153

Wichita Experience-Based Career Education Project 154

Experience-Based Career Education 155

A Proposal to Implement an EBCE Model 156

Experience-Based Career Education 157

Experience-Based Career Education 158

Computerized Exploration of Community Experiences for Career Education 159

Page
Parkway Experience-Based Career Education 160

Experience-Based Career Education (EBCE) 161

Rural/Secondary/Post-Secondary EBCE Demonstration 162

Project EXCEL (Experience-Based Career Education Learning Program 163

Six Demonstration Programs for Career Exploration Through EBCE 164

Experience-Based Career Education 165

Experience-Based Career Education in Harrisburg 166

Building Experience-Based Career Education 167

Experience-Based Career Education 168

San Antonio Experience-Based Career Education Project 169

Experience-Based Career Education Project 170

Prince William County Experience-Based Career Education Project 171

An Experience-Based Career Education Program 172

Demonstration of NIE's Experience-Based Career Education Program 173

Planning for Change Through Career Education 174

Cluster Projects

Occupational Cluster/Experience Project 177

The Tucson Experience-Based Career Education Program 178

A Team Approach to Develop and Implement an In-School Cluster Structure Designed for Occupational Exploration and Initial Job Preparation 179

Career Education: Planning, Learning, Understanding, Succeeding 180

Experience-Based Career Education 181

Page

Pathfinder: Exploration Through a Cluster Structure Linking Business, Industry, Manpower Agencies, and Vocational-Technical Education by Broadening Information, Aspiration, and Career and Educational Opportunities for Young People 182

Highline District's Vocational Exploratory and Preparatory Program 183

Work Experience and Cooperative Vocational Education

Colorado Experience-Based Career Education Model (7-10) 187

Expand and Improve the Instructional Strategies, Methods, and Techniques of Research for Better Schools (RBS) Experience-Based Career Education Program with a Currently Existing K-12 Career Education Program 188

Experience-Based Career Education 189

Experience-Based Career Education: Vocational and Career Education - A Model for Expansion and Improvement 190

Experience-Based Career Education in Cooperative Vocational Education and Work Experience 191

Demonstration of Experience-Based Career Education in Memphis, Tennessee 192

Exemplary Demonstration Project in Cooperative Education . . . 193

Community-Based Building Maintenance Mechanics Training 194

1974 Priority - K-12 Career Education (Continuations)

A Comprehensive Program of Vocational Education for Career Development: K-University 197

Specialized Career Education Staffing and a Career Oriented Curriculum 198

Career Based Curriculum for Union County 199

Development of an Exemplary Career Education Comprehensive Program in the Academic and the Vocational and Technical Education in Puerto Rico 200

1975 Priority - Cluster Projects (Continuations) Page

Career Ladder Infusion Model Building 203

Exemplary Career Education Program 204

Operational Model for Career Development and Vocational Preparation 205

Occupational Competence Access Project (OCAP) 206

Implementation of the Occupational Cluster Concept - A Curriculum Tool for Improving Career Development and Preparation Education 207

Project Bridges: Spanning the Gap Between Education and Earning a Living 208

Wayne Design for Career Education 209

Systemwide Career Education Cluster-Based Articulated Model Program: K-Graduate Education 210

Student Plans and Career Clusters 211

Career Education Materials Development for Comprehensive Guidance Counseling Implementation at the Senior High School Level 212

Virgin Islands Exemplary Vocational Career Education Center . . . 213

PART I. CURRICULUM DEVELOPMENT

Western Curriculum Coordination Center 217

East Central Curriculum Coordination Center 218

Southeast Curriculum Coordination Center 219

Northeast Curriculum Coordination Center 220

Midwest Curriculum Coordination Center 221

Northwestern Curriculum Coordination Center 222

Develop Curricula for Training Vocational Education Curriculum Specialists 223

Modification of Ten Public Service Occupational Films 224

Page

Development of Curricula for Vocational Preparation of the Gifted and Talented Students in Secondary and Post-Secondary Education 225

Development of a Nuclear Reactor Operator Technician (Trainee) Curriculum 226

Proposed Design and Broad Content Outlines for Curriculum Materials in Marketing and Distribution - Phase I 227

Consultant Services to the National Network for Curriculum Coordination 228

Handling Distribution of Marketing and Distribution Materials . 228

Updating and Revising *"Distributive Education in the High School"* 229

Rental Services for Public Service Films 229

PART J. BILINGUAL VOCATIONAL TRAINING

A Bilingual Vocational and Technical Intensive-Study Training Program 233

Bilingual Agricultural Equipment Operation and Maintenance . . . 234

Bilingual Vocational Training of Dental Assistants 235

Bilingual Vocational Training in Agricultural Occupations . . . 236

Chinese ESL/Machinist Vocational Training Project 237

Bilingual Training for Indochinese Refugees 238

Bilingual-Bicultural Human Services Training Consortium 239

New Mexico Technical Vocational School Bilingual Skills Training 240

Bilingual Secretarial Training Program 241

Viable Vocational Training for Rural Areas - Trilingual 242

Chinese English Bilingual Para-professional Training Program 243

Bilingual Vocational Training Program to Train Chinese Chefs . . 244

Page
Bilingual Training in Housing Maintenance & Repair Skills . . . 245

New Directions in Vocational Education for Hispanic Americans 246

Program for Bilingual Secretarial Training 247

Bilingual Training in Preparing Graphics for Reproduction . . . 248

Bilingual Mental Health Technologist Training Program 249

Bilingual Vocational Training 250

Vocational Education - Bilingual Training 251

Bilingual Vocational Training Program for Emergency Medical Technicians 252

Implementation of Bilingual Vocational Training 253

Bilingual Vocational Training Program 254

PROJECTS SUMMARY

		No. of Projects
Part C.	RESEARCH	124
	Adult Vocational Education	21
	Postsecondary Vocational Education	36
	Individualization and Modularization of Instructional Materials	16
	Special Needs Populations	27
	Special Projects	24
Part D.	DEMONSTRATION	60
	Experienced-Based Career Education	30
	Cluster Projects	7
	Work Experience and Cooperative Vocational Education	8
	K-14 Career Education (Continuations)	4
	Cluster Projects (Continuations)	11
Part I.	CURRICULUM DEVELOPMENT	15
Part J.	BILINGUAL VOCATIONAL TRAINING	22
		221
CONTRACTS		29
GRANTS		184

PART C PROJECTS THAT RECEIVED FUNDING DURING THE TRANSITION QUARTER

Page

Adult Vocational Education

Characteristics and Cases of Joint Industry-Education Programs Assisting Employee-Selected Career Changes 13

Entrepreneurship Education for Adults-Program Development and Implementation 14

Postsecondary Vocational Education

The Effect of Alternative Career Decision-Making Strategies on the Quality of Resulting Decisions 34

Cooperative Rural Career Guidance System 48

Development and Validation of Competency Based Instructional Systems for Adult, Post Secondary, Special Needs, and Entrepreneurship via the IDECC System 59

Cooperative Rural Career Guidance System 60

The Systems Approach to Assessment & Evaluation of Post Secondary Vocational Education Programs 67

Special Needs Populations

Overcoming Barriers to Mainstreaming: A Problem-Solving Approach 90

Development of a System for Identification and Assessment of Special Needs Learners 95

A Project to Design and Develop a Comprehensive Master Plan for Vocational Education in the Correctional Institutions of Missouri 101

The Development, Assessment and Dissemination of an Administrative Policy Manual for the Vocational Education of the Handicapped 114

Special Projects

Institute for Minority Business Education 123

Page

A Study of Exemplary Cooperation Between Institutions Providing Postsecondary Non-Baccalaureate Occupational Education 124

Minority Business Ownership and Management: A Pilot Education and Training Program for Persons in Georgia Correctional Institutions 130

The Development of Sample Designs for the Follow-up of Vocational Education Graduates 132

AIM/ARM: Abstracts of Instructional and Research Materials in Vocational and Technical Education 137

A State Management Information System Needs Study and a National Needs Assessment of Career Guidance 138

Minority Business Ownership and Management: A Pilot Education and Training Program for Persons in South Carolina Correctional Institutions 140

ABSTRACTS OF FUNDED PROJECTS

PART C: RESEARCH

Priority: Adult Vocational Education

APPLICATION NUMBER: 498AH60032 GRANT NUMBER: G007603799

PROJECT TITLE: Performance-Based Adult Vocational Education

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
S. Douglas Patterson, Supervisor of Research & Evaluation
Division of Vocational Education
Alabama State Department of Education
868 State Office Building
Montgomery, Alabama 36130 (205) 832-3476

FUNDING PERIOD: July 1, 1976 - December 31, 1977

OBJECTIVES

The goals of this project are to develop an adult vocational education competency-based program using a research-based instructional systems design and to assess the application of competency-based research products being developed by the Vocational Technical Education Consortium of States (V-TECS) in the development of adult vocational education programs. Objectives include:

1) Design a model for implementing competency-based adult vocational education.
2) Develop a plan for training adult vocational instructors in developing and using competency-based instruction.
3) Train 10 adult vocational instructors to criterion levels of performance in competency-based instruction.
4) Implement competency-based instruction in 40 adult vocational classes.
5) Complete an evaluation study of the effects of using competency-based instruction in adult vocational education.

PROCEDURES

Thirty adult vocational instructors will be randomly assigned to three groups of 10 each. One group will receive catalogs of performance objectives and intensive inservice training in developing performance-based instruction. The second group of instructors will receive only the catalogs of performance objectives. The third group will develop conventional instruction programs. Each instructor will teach a series of two courses. All adult students in the courses will complete pre- and post-performance tests. Analysis will compare the performance of adult students in the three program situations.

EXPECTED CONTRIBUTION TO EDUCATION

The results of the experiment will be research-validated evidence as to the effectiveness of performance-based instructional materials being developed by V-TECS. The validated procedures for training adult vocational instructors to develop performance-based instruction will be used to train 1,800 adult vocational instructors who teach 86,000 adults per year. The model for implementing performance-based instruction has the potential of bringing performance-based instruction to 245,000 secondary and postsecondary vocational education students in Alabama.

APPLICATION NUMBER: 498AH60090 GRANT NUMBER: G007603753

PROJECT TITLE: A Model for Vocational Education Program Development in Entrepreneurship

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Paul R. Cunningham, Research Associate
Arkansas Department of Education
Little Rock, Arkansas 72201 (501) 371-1855

FUNDING PERIOD: June 30, 1976 - December 31, 1977

OBJECTIVES

The overall purpose of this project is to expand the vocational education curriculum to provide adults with entrepreneurial competencies which will facilitate self-employment. More specifically, the project goals are to:

1) Develop and implement modules of instruction in entrepreneurship for adults in self-employment and potential entrepreneurs.
2) Develop a staff development program for adult educators.
3) Develop and implement a communication system which will provide more visibility to occupational training for adults.
4) Coordinate realistic training experiences in entrepreneurship.

PROCEDURES

Approximately twelve modules will be identified which will adequately cover the entire spectrum of small business ownership. A content specialist will develop technical content materials for the selected entrepreneurial modules. A selection of onsite teams will pilot test the materials. Staff development activities will include three seminars and a 2-week workshop. The project will culminate with self-contained instructional modules in the identified areas of entrepreneurship and media for maximizing vocational technical education for adults.

EXPECTED CONTRIBUTION TO EDUCATION

The expected benefits to be derived are 1) a curriculum stressing successful techniques in entrepreneurship which is relevant and exhibits considerable transportability; 2) a cadre of adult educators to teach ownership and management competencies; and 3) individuals with improved competencies in starting and managing a business enterprise. It is anticipated that the materials will be used by the 23 postsecondary vocational technical schools and many of the 321 school districts offering vocational education.

APPLICATION NUMBER: 498AH60141 GRANT NUMBER: G007603800

PROJECT TITLE: Adult Education for Women's Entrepreneurship: Women's Ownership Workshop

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Melvin L. Barlow, Director
Division of Vocational Education
Graduate School of Education
University of California at Los Angeles
133 Moore Hall
405 Hilgard Avenue
Los Angeles, California 90024 (213) 825-1838

FUNDING PERIOD: July 1, 1976 - December 31, 1977

OBJECTIVES

A career education module will be prepared detailing how the learning activities are to be used within the Andragogy instructional framework. Objectives are:

1) Development of competency-based learning activity packages and instructor's handbook on the use of these packages.
2) Review and evaluation of the packages.
3) Staff development and inservice training for adult educators and resource persons.
4) Workshop and clinic sessions for participants.
5) Preparation and distribution of the final report.

PROCEDURES

An advisory committee and third party evaluation will be used to make recommendations and evaluation of the packages. Workshop sites will be selected where local education agencies (LEAs) have made a commitment to provide resources for actual recruitment of participation making available facilities and equipment and certifying the availability of community resources. Staff development will cover learning activity packages, Andragogy, program management, career development, cooperative work experience, and business plan, and will focus on understanding and implementing McClelland's Achievement Motivation Model. There will be a series of regional workshops which will correspond to the teaching-learning strategies.

EXPECTED CONTRIBUTION TO EDUCATION

The form of vocational preparation proposed in this project is competency-based and self-paced for adult clients, thus concurrently providing a vehicle for greater involvement by vocational educators in adult education. In addition, through staff development, the instructors will adopt a comprehensive design for adult education and develop more appropriate skills for teaching adults.

APPLICATION NUMBER: 498AH60059 GRANT NUMBER: G007604116

PROJECT TITLE: Competency Based Adult Vocational Education Through Performance Based Vocational Teacher Education - An Implementation Delivery System

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Arthur O. Berry, Coordinator, Vocational-Technical Education
College of Education
University of Maine at Portland-Gorham
College Avenue
Gorham, Maine 04038 (207) 839-6771

FUNDING PERIOD: July 1, 1976 - December 31, 1977

OBJECTIVES

This project is designed to develop within adult instructors the skills and techniques that will cause them to structure their courses and programs around competencies. Specific objectives are to:

1) Identify two target groups of vocational adult instructors and develop their professional teaching competencies.
2) Identify occupational competencies and develop materials for use in their vocational adult classes.
3) Field test vocational adult materials and evaluate professional teaching competencies.

PROCEDURES

Two groups of 10 vocational adult instructors representing two occupational areas from the Northern Maine Vocational Planning District will be selected to complete the competency-based professional education sequence offered through the University of Maine at Portland-Gorham. During completion of the professional sequence, materials and a structure for offering vocational adult courses based on occupational competencies will be developed. Upon completion of the professional sequence, a six-month test period will be conducted during which instructors will initiate vocational adult courses based on occupational competencies and will be evaluated on their teaching competency.

EXPECTED CONTRIBUTION TO EDUCATION

This project is designed to develop instructor competencies in two target groups of adult instructors. They, in turn, are to produce competency-based instructional materials for their adult courses. These will consist of task analyses, units of instruction, and unit competency tests for use in adult programs within the State. Targeted groups are from northern Maine, an economically depressed rural area with large numbers of under-employed and unemployed adults. Once established, the model will be utilized in other occupational areas under the direction of the Maine State Department of Education and through the staff development efforts of the University of Maine at Portland-Gorham.

APPLICATION NUMBER: 498AH60279 GRANT NUMBER: G007605051

PROJECT TITLE: Characteristics and Cases of Joint Industry-Education Programs Assisting Employee-Selected Career Changes

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
L. Allen Parker, CTS Executive Director
Technical Education Research Centers, Inc.
44 Brattle Street
Cambridge, Massachusetts 02138 (617) 547-0430

FUNDING PERIOD: September 13, 1076 - March 31, 1978*

OBJECTIVES

Many employees become dissatisfied with their careers and could benefit from joint industry-education programs assisting them to prepare for and make self-selected career changes. The objectives of this project are to:

1) Identify successful and less successful career-change programs.
2) Compare 20 cases of successful and less successful joint programs in order to ascertain the factors associated with success.
3) Publicize the findings in an illustrated publication and a compendium of case studies encouraging employers, educators, labor representatives, and government officials to establish new joint programs.

PROCEDURES

1) Survey the top personnel executives in the Fortune 800 largest U. S. manufacturing and service firms regarding their career change programs.
2) Survey top administrators in 2,000 postsecondary educational institutions.
3) Prepare a literature synthesis on career change experiences.
4) Select 20 successful and less successful joint career-change programs.
5) Prepare a summary comparison and a compendium of case studies.
6) Prepare and print a publication in illustrated magazine format.
7) Disseminate publication and compendium copies and obtain feedback.

EXPECTED CONTRIBUTION TO EDUCATION

The disseminated products of this project will be 500 copies of a compendium of case studies and 6,000 copies of an illustrated publication. The publication will increase educator, employer, labor representative, and government official awareness of the need for employee-selected career-change programs and means to establish them. New joint programs will likely be initiated as a result. The increased availability of joint programs in turn will allow more adults to prepare for mid-career changes intended to increase their productivity and make their lives more satisfying.

*Funding received during the transition quarter.

APPLICATION NUMBER: 498AH60199 GRANT NUMBER: G007605299

PROJECT TITLE: Entrepreneurship Education for Adults-Program Development and Implementation

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
E. A. Persons and G. I. Swanson
Agricultural Education Division, College of Education
University of Minnesota
130 Classroom Office Building, St. Paul Campus
St. Paul, Minnesota 55108 (612) 373-1020

FUNDING PERIOD: September 30, 1976 - March 31, 1978*

OBJECTIVES

The purpose of this project is to expand the development, dissemination, and utilization aspects of entrepreneurial inquiry. Specific objectives are to:

1) Prepare instructional modules for postsecondary and adult students who are contemplating a career as an entrepreneur.
2) Refine, disseminate, and assist in utilization of instructional materials for individuals already engaged as entrepreneurs.
3) Create model legislation and state plan provisions for entrepreneurial training for postsecondary and adult students.

PROCEDURES

Instructional modules will be developed using the same curriculum team that developed the adult entrepreneurial training program. Twelve to 15 modules of instruction that can be integrated into existing vocational training programs or used for adult instruction will result. Through a series of articulated conferences, individuals in state departments of education, colleges, and local educational agencies will learn how programs for entrepreneurial training are developed, implemented, and managed. Based on a sampling of state plans for vocational education and state education laws, a model for legislation and state plan provisions will be developed to enable states to provide support for entrepreneurial training.

EXPECTED CONTRIBUTION TO EDUCATION

This study is an attempt to broaden the focus of vocational education to include career preparation for the self-employed entrepreneur. Dissemination activities will alert the state departments of education and teacher training departments throughout the United States to the potential benefits for establishing Small Business Management training programs. Other project activities will work to eliminate or neutralize the restraints commonly encountered in establishing a new curriculum effort.

*Funding received during the transition quarter.

APPLICATION NUMBER: 498AH60019 GRANT NUMBER: G007603750

PROJECT TITLE: A Cooperative Vocational Education Investigation to Develop In-Service Training Programs for Operating Supervisory Personnel

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
R. Frank Harwood, Professor
Business Education/Office Administration
School of Business Administration
University of Mississippi
University, Mississippi 38677 (601) 232-7492

FUNDING PERIOD: July 1, 1976 - December 31, 1977

OBJECTIVES

The principal objective of this investigation is to develop cooperatively an inservice training program for operating supervisory personnel. The thrust of this program will be aimed toward developing leadership capabilities. More effective leadership may help to raise productivity, a major concern in Mississippi, which ranked 50th of the states in per capita income in 1975.

PROCEDURES

1) A questionnaire will be developed to determine specific employer needs and prospective resources.
2) Associate field personnel from high schools, vocational-technical centers, and colleges or universities will be recruited and trained to use the questionnaire.
3) Employers with 25 or more employees at one site will be sought to participate in each of Mississippi's 82 counties.
4) Meaningful leads and specifics on existing nonfunded and funded programs will be investigated.
5) Professional judgments and reactions will be solicited from institutional colleagues throughout the country.

EXPECTED CONTRIBUTION TO EDUCATION

The investigative process and subsequent program involvement will foster a closer working relationship between business and educational institutions. The educational benefit can come from the added exposure that teachers have in being involved in meaningful economic problems. Such experiences can help cooperating teachers bring a new dimension into their classrooms.

APPLICATION NUMBER:	498AH60054	GRANT NUMBER: G007603752
PROJECT TITLE:	Personnel Development for Entrepreneurs	
PRINCIPAL INVESTIGATOR AND ORGANIZATION:	Julie N. Boettcher and Admin. Assistant Nebraska RCU Box 33, Henzlik Hall University of Nebraska Lincoln, Nebraska 68588 (402) 472-3337	Ronald M. Hutkin Assoc. Dean Platte Tech. Comm. College P. O. Box 1027 Columbus, Nebraska 68601 (402) 564-7132
FUNDING PERIOD:	July 1, 1976 - August 31, 1977	

OBJECTIVES

The purpose of this project is to design intensified, individualized, and group-oriented instructional programs in personnel development for the entrepreneur. The principal objectives are to:

1) Design an instructional program and delivery system for assisting entrepreneurs and potential entrepreneurs in obtaining assessment, planning, and management skills.
2) Test the viability of the instructional program and delivery system by installation of courses for entrepreneurs at the Platte Campus to serve both urban and rural populations.
3) Prepare materials and procedures documentation for the operation of personnel development institutes in Nebraska Technical Community Colleges.

PROCEDURES

Phase I, the assessment phase of the project, will be concerned with establishing advisory committees (one urban and one rural) and conducting a needs assessment of a sample of small business managers to determine course content. Phase II will be the development of instructional materials and training in service agencies to small businesses. Phase III will consist of a field test of course materials through classes conducted at the Platte Community College. Trained instructors will conduct the classes and supervise the participants on the job following completion of the course.

EXPECTED CONTRIBUTION TO EDUCATION

The availability of an instructional package for entrepreneurial programs assures that participants may be served through the present technical community colleges of Nebraska. This project will also field test a method of inservicing potential teachers of entrepreneurial programs through cooperative placement in the service agencies of small business.

APPLICATION NUMBER: 498AH60330 GRANT NUMBER: G007603758

PROJECT TITLE: Expanding Competency-Based Adult Vocational Education in Nevada

PRINCIPAL INVESTIGATOR AND ORGANIZATION:

Ray D. Ryan, Jr., Director
Vocational-Technical and Career Education
University of Nevada, Las Vegas
4505 Maryland Parkway
Las Vegas, Nevada 89154

FUNDING PERIOD: July 1, 1976 - December 31, 1977

OBJECTIVES

1) Initiate and/or expand competency-based adult vocational education (CBAVE) in Nevada.
2) Develop an individualized program of instruction with a technology-based delivery system that will be used for presenting the CBAVE information.
3) Evaluate this project and report the results of the evaluation to the SDOE and HEW.

PROCEDURES

The project has five main courses of action: 1) collection and review of existing materials, 2) modification and design of materials for the workshop, 3) implementation of workshops, 4) evaluation and reporting of workshops, and 5) followup of project participants. Two workshops are scheduled for the project: the first will be an orientation to the project and the materials that had been developed, and the second will be a callback and evaluative session. Workshop participants will be from the following groups: community college adult vocational teachers, vocational administrators, and general vocational teachers.

EXPECTED CONTRIBUTION TO EDUCATION

It is anticipated that as a result of this project:

1) There will be designed and made available a quantity of audiovisual materials suitable for use in an individualized manner.
2) The reports and articles published about this study will be made available to thousands of readers.
3) Initially 4,000 students in Nevada's Adult Vocational Education Programs will benefit from improved instruction.

APPLICATION NUMBER: 498AH60218 GRANT NUMBER: G007604056

PROJECT TITLE: Career Planning Programs for Women Employees

PRINCIPAL INVESTIGATOR AND ORGANIZATION:

Louise Vetter, Specialist
The Center for Vocational Education
The Ohio State University
1960 Kenny Road
Columbus, Ohio 43210 (614) 486-3655

FUNDING PERIOD: July 1, 1976 - December 31, 1977

OBJECTIVES

1) Determine the current status of career planning programs for women employees.
2) Develop a prototype career planning program for women employees that will be adaptable to both educational and employment settings.

PROCEDURES

Parameters for career planning programs for women employees will be defined and criteria for reviewing programs established. The literature will be reviewed. Survey instruments will be developed and data collected from large city adult vocational programs, technical institutes, community and junior colleges, and business and industry. Using the data from the surveys, a prototype career planning program for women employees will be developed, using a modified Delphi technique. Products listed below will be prepared.

EXPECTED CONTRIBUTION TO EDUCATION

There will be five products from this project: 1) review of literature, 2) survey report, 3) annotated bibliography, 4) prototype career planning program; and 5) final report. These products will meet a chronic need of vocational educators and counseling and career planning personnel in adult, community, and junior college programs for tangible assistance in planning and developing career planning programs for women employees who are potential students for such educational institutions. The products will sensitize personnel program directors in business and industry to the need and opportunity for planning and developing programs for their women employees who are interested in upgrading their occupational status, and will provide a model for taking immediate action. Perhaps the most promising payoff will result where educators and business and industry personnel use these materials for planning and developing joint programs to meet the career planning needs of women employees.

APPLICATION NUMBER: 498AH60237 GRANT NUMBER: G007605788

PROJECT TITLE: Identification and Analysis of Competency-Based Adult Vocational Education Programs

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Earl Russell, Specialist
The Center for Vocational Education
The Ohio State University
1960 Kenny Road
Columbus, Ohio 43210 (614) 486-3655

FUNDING PERIOD: July 1, 1976 - June 30, 1977

OBJECTIVES

Assemble information on competency-based education programs, especially those for adult learners in public and private vocational education, and disseminate that information to competency-based education (CBE) program developers and operators.

PROCEDURES

To accomplish the overall objective of the proposed project, the scope of work has been divided into four primary activities:

1) Identification of CBE programs.
2) Survey of CBE programs.
3) Conduct of a workshop for CBE program developers and operators.
4) Preparation of reports and publications on the project.

EXPECTED CONTRIBUTION TO EDUCATION

Three documents will be outputs of the project:

1) A comprehensive directory of competency-based adult vocational education programs.
2) A technical report of the survey of CBE program characteristics.
3) Workshop proceedings will be prepared and distributed to workshop participants, other interested individuals, and major information systems in the United States.

APPLICATION NUMBER: 498AH60278 GRANT NUMBER: G007603757

PROJECT TITLE: Instructional Materials for Adult Entrepreneurship of Apparel Shops

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Kathryn Greenwood, Associate Professor Clothing, Textiles, and Merchandising
Division of Home Economics
Oklahoma State University
Stillwater, Oklahoma 74074 (405) 624-5035

FUNDING PERIOD: July 1, 1976 - December 31, 1977

OBJECTIVES

1) Develop individualized and modularized instructional materials which will provide entrepreneurial competencies for potential small apparel shop owners.
2) Test the instructional materials through use in a pilot open entry/open exit setting with role model merchants as consultants.
3) Evaluate the instructional materials during the pilot study period with assistance from a panel of business experts.
4) Revise the instructional materials and make recommendations concerning their continued use in open entry/open exit programs to provide adult entrepreneurial competencies which facilitate self-employment.

PROCEDURES

The materials will be designed to incorporate entrepreneurial competencies within the four functions of retail store organization: 1) accounting and control, 2) buying and merchandising, 3) operation and management, and 4) advertising and promotion. Successful apparel merchants and other business experts will be involved in the development of the instructional materials, in the implementation of the pilot open entry/open exit program, in the evaluation of the results of the research project, and in the revision of instructional materials.

EXPECTED CONTRIBUTION TO EDUCATION

1) Instructional materials will be made available for use in adult open entry/open exit programs by Distributive Education and Home Economics teacher-coordinators throughout the country.
2) Individualized and modularized learning materials will facilitate effective instruction and will allow flexibility in the use of time by the teacher-coordinator.
3) Flexible learning situations will be created for adult trainees.
4) The instructional system will serve as a model for the development of entrepreneurial competencies necessary for success in establishing many types of specialty shops.

APPLICATION NUMBER: 498AH60027 GRANT NUMBER: G007603751

PROJECT TITLE: Individualized Employee Training for Small Rural Businesses

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Harry Hoch, Director of Continuing Education
Treasure Valley Community College
650 College Boulevard
Ontario, Oregon 97914 (503) 889-6493

FUNDING PERIOD: July 1, 1976 - June 30, 1977

OBJECTIVES

1) Demonstrate to small businessmen the value of an individualized employee training program.
2) Demonstrate a technique by which an individualized employee training program can be developed and put into use in small businesses.
3) Assist small business managers in implementing their management skills in training employees for conformity to various state and federal regulations, profitable management objectives, and setting of management priorities.

PROCEDURES

The project features: 1) selection and use of local resource people; 2) use of color video camera and cassette tape to make up at least three individualized training programs (specific for each business) for each of the twelve participating businesses; 3) use of video tape cassette for delivery; 4) setting up five viewing (training) centers; and 5) establishing a library of materials that businessmen will use. A pilot program will be shown to potential cooperating businesses to demonstrate what the program can do in responding to management needs. Following the identification of the 12 participating businesses, specific needs of each business will be determined, and a program schedule developed. Evaluation will be conducted by a third party, and will be administered to employers, employees, and customers through a combination of questionnaires and personal interviews.

EXPECTED CONTRIBUTION TO EDUCATION

1) Increased management efficiency in small businesses.
2) Increased cooperation between Treasure Valley Community College and small businesses.
3) Improved services to customers.
4) Increased earnings to small businesses.
5) Employees with better training and more enthusiasm for their jobs.
6) Improved cooperation with State and Federal regulatory agencies.
7) Availability of the video tapes for dissemination.

APPLICATION NUMBER: 498AH60119 GRANT NUMBER: G007603755

PROJECT TITLE: Development and Field Test of a Multi-Purpose Computerized Vocational Counseling Program for Providing Placement, Occupational and Educational Information to Unemployed Adults, Handicapped Persons and Inmates in Correctional Institutions

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Walter A. Cameron, Associate Professor
College of Education
The University of Tennessee
401 Alumni Hall
Knoxville, Tennessee 37916 (615) 974-4466

FUNDING PERIOD: July 1, 1976 - December 31, 1977

OBJECTIVES

1) Assess vocational counseling needs of clientele.
2) Develop a multipurpose occupational information computer program for providing online access to placement, occupational and educational opportunity data.
3) Develop user guides and sound filmstrips for using occupational information and for developing basic employability skills.
4) Field test the computer package on four types of computers and assess user reactions to all facets of the vocational counseling services.

PROCEDURES

The major thrust of this project will be to determine, by survey and interview, the vocational counseling needs of the clientele to be served and to develop a multipurpose computerized information program to meet these needs. The developed computerized program will be installed on four different types of computer systems in Tennessee. In addition, user guides and a series of sound filmstrips will be developed and evaluated. Inservice training will be provided to all user groups. Evaluation data on the impact of the services will be collected and results will be compared with control groups of adults, handicapped persons and prison inmates who have not used the materials developed for this project.

EXPECTED CONTRIBUTION TO EDUCATION

This project is expected to provide vocational counseling services to approximately 1,000 unemployed and underemployed adults, 2,000 handicapped persons and 1,000 prison inmates in Tennessee. The master occupational information computer package developed for this project will be designed so it can be easily localized and updated for use on computers with basic time-share capabilities. In addition, evaluated user guides and sound filmstrips to assist adults, handicapped persons, and prison inmates in making vocational training and job choices will result from this project.

APPLICATION NUMBER: 498AH60301 GRANT NUMBER: G007603803

PROJECT TITLE: Developing Adult Guidance-Placement Models in Vermont

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
John H. Taylor
Vermont State Department of Education
State Street
Montpelier, Vermont 05602 (802) 828-3101

FUNDING PERIOD: July 1, 1976 - June 30, 1977

OBJECTIVES

Vermont's 15 area vocational centers could be better utilized if guidelines, procedures and adult counseling existed to assist adults in establishing a career direction and methods for achieving it. This project will:

1) Establish an advisory committee to assist the project director.
2) Complete a review of the literature on adult guidance models.
3) Develop sufficient procedures and documents for two adult guidance models.
4) Implement on a pilot basis at least one guidance model with a minimum of 30 adults in an area vocational center and its sending schools.
5) Complete a documentation of the processes, procedures, development and implementation of the adult guidance models.
6) Complete an evaluation of the implementation of the model using the criteria of cost-effectiveness and results.

PROCEDURES

A full-time project director will have the major responsibility for researching, developing and implementing the model. The advisory committee will provide input to the model components and modifications and will experience the training materials before use in the field. Thirty adults to participate in the field testing will come from the area served by the vocational center. Based on the field testing the model will be documented. Training packages and a workshop will be available to adult vocational education. A third party evaluator will report on the results and cost effectiveness.

EXPECTED CONTRIBUTION TO EDUCATION

An annotated bibliography of adult guidance procedures, processes, and results will be completed. A procedures manual will be available to 15 area vocational directors, 12 guidance coordinators, 6 adult vocational education supervisors, and the project advisory committee. A training workshop for 15 adult vocational education supervisors and area vocational center directors will be conducted.

APPLICATION NUMBER: 498AH60108 GRANT NUMBER: G007603754

PROJECT TITLE: Developing Competency-Based Individualized Instruction Modules for Owner-Managers of Small Business Firms

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Barry L. Reece and Richard L. Lynch
Division of Vocational and Technical Education
Virginia Polytechnic Institute and State University
Blacksburg, Virginia 24061 (703) 951-5191

FUNDING PERIOD: July 1, 1976 - December 31, 1977

OBJECTIVES

The purpose of this project is to develop, administer, and evaluate a series of individualized instructional modules designed to develop managerial-entrepreneurial competencies. The modules will be delivered to business owner-managers on a one-to-one basis as soon as they begin to operate their businesses. Specific objectives are:

1) Identify core-crucial managerial-entrepreneurial competencies which are needed by owner-managers of a small retail, wholesale, or service business.
2) Prepare a series of individualized instructional modules designed to develop these competencies.
3) Recruit and train teacher-counselors to assist owner-managers of small business with completion of the instructional modules.
4) Recruit and enroll a minimum of 25 owner-managers of newly-formed business firms in a program of study which features an individualized instructional format.
5) Conduct an evaluation to assess the degree to which the instructional modules have aided owner-managers.

PROCEDURES

A review of the literature devoted to causes of small business failure should yield a list of core-crucial competencies necessary for successful management of a small marketing firm. Once this list is validated, a series of individualized instructional modules designed to develop these core-crucial competencies will be developed. The project staff will then recruit and train teacher counselors who, in most cases, will be distributive education teacher-coordinators to assist a minimum of 25 owner-managers of newly-formed small business with completion of the instructional modules. Owner-managers will be located within two metropolitan communities and one multicounty region of southwestern Virginia. The individualized instructional program will extend over a period of 6 months.

EXPECTED CONTRIBUTION TO EDUCATION

Each year approximately 400,000 persons form new business enterprises, of which 90 percent fail. Educators throughout the nation will be able to use these modules to assist owner-managers at the most crucial time--opening through the first 6 months of the life of the business.

APPLICATION NUMBER: 498AH60248 CONTRACT NUMBER: 300760260

PROJECT TITLE: Analysis of the Relationship of Vocational Education to Women's Entry and Retention into Apprenticeship Programs

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Roslyn D. Kane
Rj Associates, Inc.
1018 Wilson Boulevard
Arlington, Virginia 22209 (703) 524-3360

FUNDING PERIOD: July 1, 1976 - June 30, 1977

OBJECTIVES

This project will examine the characteristics of women who apply for apprenticeship, the preparation they have received, and the cause of their acceptance to, or rejection from, apprenticeship programs. Objectives are to determine:

1) Prior training women found most (or least) useful in preparing for written and oral admissions exams for entry into apprenticeship programs.
2) Women's perceptions of existing special programs.
3) The special support programs needed to overcome the problems that have caused a large percentage of women to drop out.

PROCEDURES

Taped interviews of unsuccessful women applicants, women apprentices, Joint Apprenticeship Councils of ten unions, and educators will be analyzed to determine the socio-demographic characteristics of the women, type of training, course content, etc., prior to taking the apprenticeship examination. Variables will be tested to determine socio-demographic factors as well as the type and extent of training. Interviews will be subject to content analysis to determine the barriers to admission and retention in apprenticeship as perceived by each group, and the effectiveness of the particular programs.

EXPECTED CONTRIBUTION TO EDUCATION

Recommendations will be made for strengthening the role of vocational education at all levels in assisting women to enter and remain in apprenticeship programs. Material will be prepared to advise women still in high school and those returning to the work force on the most advisable paths to a successful career in apprenticeable trades. Material will be prepared for BOAE for dissemination to vocational educators and counselors.

APPLICATION NUMBER: 498AH60004 GRANT NUMBER: G007603973

PROJECT TITLE: Assessment of Adult Vocational Outreach Programs of Community Colleges in the Pacific Northwest (DHEW Region X)

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
James L. Ratcliff, Assistant Professor
Department of Education
Washington State University
Pullman, Washington 99163 (509) 335-5012

FUNDING PERIOD: September 15, 1976 - March 15, 1978

OBJECTIVES

The purpose of the project is to assess the current procedures of selected nonmetropolitan community college districts in providing adult vocational outreach programs to their outlying communities. The project will 1) survey the adult vocational learner interests and needs in selected rural communities of the target college districts; 2) identify curricular, guidance, and administrative services available to residents of these communities; and 3) identify procedural elements of adult vocational outreach programs that are particularly effective and/or innovative.

PROCEDURES

A 60 percent stratified sample of all public 2-year colleges with nonmetropolitan, noncampus district populations will be drawn according to the size-density model. Within each district, a stratified sample of communities will represent 5-10 percent of the total noncampus population. In each selected community the project will construct a demographic portrait of the population, conduct a needs assessment of adult vocational learner interests, and identify and describe adult vocational programs and activities by all local and state agencies. The adult vocational programs of colleges and other agencies will be compared according to their effectiveness in meeting community needs.

EXPECTED CONTRIBUTION TO EDUCATION

The results of this study should provide a basis for individual colleges serving basically rural populations to assess the effectiveness of their programs. Additionally, these colleges should, through the final report, have information regarding innovative programs for providing adult vocational education to rural and geographically isolated communities.

APPLICATION NUMBER: 498AH60177	GRANT NUMBER: G007603756

PROJECT TITLE:	Development of a Curriculum for Upgrading Mine Electricians on the Use of Solid-State Electrical Controls
PRINCIPAL INVESTIGATOR AND ORGANIZATION:	William Dillon West Virginia Department of Education 1900 Washington Street Charleston, West Virginia 25305 (304) 369-1628
FUNDING PERIOD:	July 1, 1976 - June 30, 1977

OBJECTIVES

This project will develop an instructional program for training underground mine electricians to locate trouble and do corrective maintenance on solid-state electrical controls. The program will be used for updating 7,000 certified and 5,000 noncertified men presently employed in the mining industry. Objectives are to: 1) promote a cooperative, educational effort between vocational education and industry; 2) define competencies needed by coal mine electricians to work effectively with solid-state electrical controls on mining equipment; 3) develop a competency-based curriculum utilizing short, self-paced instructional modules suitable for open entry/open exit scheduling; and 4) provide electrical panels for demonstration and training purposes.

PROCEDURES

An advisory committee of five members from industry and education, in conjunction with the project directors, will coordinate the efforts of a team of six consultants, a team of six mine electricians now serving as teachers, a team of four curriculum writers, and a team of two teaching aid developers. The units of instruction will be pilot tested and proper revision will be made. The coordinators of curriculum and media development, Department of Vocational Education, will be available to advise and assist with the writing and evaluation.

EXPECTED CONTRIBUTION TO EDUCATION

This project will further strengthen the ties between vocational education and industry by providing industry with a useful tool to update their personnel and set the stage for further cooperative efforts of this kind. Education will gain a useful teaching tool and a cadre of trained instructors to implement it. This program will be sent to the Educational Resources Information Center (ERIC) and to each regional curriculum laboratory to be used as is or as a model for similar projects.

APPLICATION NUMBER: 498AH60178 GRANT NUMBER: G6007603801

PROJECT TITLE: Development of a Competency-Based Curriculum for Upgrading Water Treatment Technicians.

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
T.A. Welty, Coordinator of Public Service Training
West Virginia Department of Education
1900 Washington Street, East
Charleston, West Virginia 25305 (304) 348-3896

FUNDING PERIOD: July 1, 1976 - June 30, 1977

OBJECTIVES

The purpose of the project is to develop an instructional program for training water treatment technicians that will combine a competency-based format, short modules of instruction, and provision for open entry/open exit. The program could be used in both a postsecondary situation for new trainees and in an adult education setting for either new trainees or for upgrading presently employed water treatment technicians. Specific objectives are to: 1) demonstrate the feasibility and advantages of cooperative educational efforts among the employing industry, the regulatory agency, and vocational education; 2) determine the competencies needed by water treatment technicians to meet certification standards and to work effectively and efficiently in a water treatment facility; and 3) develop a curriculum based on the determined competencies.

PROCEDURES

The project will be a cooperative effort between vocational education, the State Health Department, and the water treatment industry. To facilitate and insure this cooperation, a team of three project co-directors and a team of three consultants will function under the direction of the project director. The other co-directors will be from the West Virginia Department of Health. A team of consultants from the industry will work with a full-time project coordinator in curriculum development and report preparation. The units of instruction will be pilot tested as they are completed. The coordinators of curriculum and media development, Department of Vocational Education, will be available to assist with the writing and evaluation.

EXPECTED CONTRIBUTION TO EDUCATION

The project should result in 1) strengthened cooperation between vocational education, other state agencies and industry in providing educational programs; and 2) the development of an instructional program for training or upgrading water treatment technicians which can be used effectively in West Virginia and other states.

APPLICATION NUMBER: 498AH60269 GRANT NUMBER: G007603802

PROJECT TITLE: Development of Guidance and Counseling Program in Vocational Education for Employed Adults on Wind River Reservation

PRINCIPAL INVESTIGATOR AND ORGANIZATION:

John Smith
Arapahoe Education Committee
Araphoe Business-Council
P. O. Box 217
Fort Washakie, Wyoming 82514

FUNDING PERIOD: July 1, 1976 - June 30, 1977

OBJECTIVES

The objectives of the project are to: 1) identify the vocational education needs of employed adults on the Wind River Reservation; 2) determine the extent to which agencies, organizations, or individuals are providing vocational education services for employed adults; 3) develop a guidance and counseling program which will relate the provision of vocational education services to career progression plans of employed adults; and 4) develop coordinated activities between vocational education services and public employment training programs funded under the Comprehensive Employment Training Act (CETA).

PROCEDURES

The identification of vocational education needs will be accomplished primarily through personal interviews with present employers and employees. Approximately 25-30 employers will provide information concerning skill requirements for vacant and non-vacant jobs. Agencies currently providing vocational education services will be contacted directly to determine type and extent of services. People served by these agencies will also be contacted to determine views relative to adequacy of assistance. An inventory of services will be compiled, printed and distributed to reservation residents. Related efforts in other areas of high unemployment will be reviewed as part of the development of the guidance program. Based upon this information and the results of the survey, possible methods of providing career counseling to current and prospective employees will be identified.

EXPECTED CONTRIBUTION TO EDUCATION

The results of this project will be documented in two written reports which should be of interest to those dealing with Indian reservations and high unemployment areas.

PART C: RESEARCH

Priority: Postsecondary Vocational Education

APPLICATION NUMBER: 498AH60157 GRANT NUMBER: G007603721

PROJECT TITLE: Computer-Assisted Guidance: An Individualized Counseling System

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Patrick Suppes, Director
Institute for Mathematical Studies in the Social Sciences
Stanford University
Stanford, California 94305 (415) 497-3131

FUNDING PERIOD: July 1, 1976 - December 31, 1977

OBJECTIVES

The goal of the project is to apply knowledge gained in computer-assisted instruction and computer science to produce an interactive vocational guidance counseling program. Emphasis will be placed on four areas:

1) Constructing models of the student's interests to guide the presentation of materials.
2) Designing the system so that the data base is easily updated.
3) Making the program simple to use.
4) Insuring that the resulting system is modular and transportable.

PROCEDURES

The work will be conducted in three major phases:

1) Obtain and study as many other computer-assisted guidance systems as possible and consult with experienced guidance counselors about what is needed.
2) Design and write the program; initial testing and debugging, to include the data base; further consultation with guidance counselors to insure genuine relevance to the guidance process.
3) Field test and evaluate the system in a school environment. Extensive data will be collected and analyzed to allow an objective evaluation of the effectiveness and efficiency of the system.

EXPECTED CONTRIBUTION TO EDUCATION

A demonstration of how sophisticated computer models of data representation can be applied to individualize the vocational guidance process in the context of computer-assisted guidance by producing a simple to use, transportable computer program with data bases which can easily be revised to fit a wide variety of economic and geographic conditions.

APPLICATION NUMBER: 498AH60282 GRANT NUMBER: G007605241

PROJECT TITLE: The Effect of Alternative Career Decision-Making Strategies on the Quality of Resulting Decisions

PRINCIPAL INVESTIGATOR AND ORGANIZATION:

John D. Krumboltz, Professor
School of Education
Stanford University
Stanford, California 94305 (415) 497-2108

FUNDING PERIOD: September 1, 1976 - March 1, 1978*

OBJECTIVES

The purpose of the proposed research is to discover whether alternative approaches to making career decisions have any measurable impact upon the quality of the resulting decisions. More specifically: 1) To what extent does the teaching and application of rational, intuitive, or fatalistic strategies produce optimal decision outcomes? 2) To what extent does the teaching and application of each step in the proposed rational decisionmaking process contribute to optimal decision outcomes? 3) To what extent can individuals who will profit differentially from instruction in the various strategies of decisionmaking be identified in advance?

PROCEDURES

A criterion instrument, the Career Decision Making Analog (CDMA), that will provide the basis for determining which decisionmaking strategies produce better outcomes will be developed. A brief questionnaire will be constructed to assess each individual's habitual preference for using one of the three decisionmaking strategies. These data will be used to block for type of predisposition in each of the several treatments. There will be two major experiments: experiment I is designed to compare the three overall strategies; experiment II is designed to analyze the individual steps in the rational model, to see the extent to which each step contributes to the desired outcomes. Acceptance of responsibility for the decision will be estimated from responses to a short questionnaire administered at the end of the CDMA. Decision quality will be estimated from the similarity of CDMA outcomes to each decider's values.

EXPECTED CONTRIBUTION TO EDUCATION

The end products will be: 1) a criterion instrument that can be used to evaluate the outcomes of programs designed to develop career decisionmaking skills; 2) an assessment device designed to identify predispositions to various decisionmaking strategies; and 3) a set of training materials for teaching various decisionmaking strategies, each identified as to its relative effectiveness in producing prescribed outcomes with identifiable individuals.

*Funding received during the transition quarter.

APPLICATION NUMBER: 498AH60292 **GRANT NUMBER:** G007603322

PROJECT TITLE: Building a Model for the Linkage and Coordination of Vocational Education at Post Secondary Schools and Business, Industry, and Labor

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Bela H. Banathy
Far West Laboratory for Educational Research and Development
1855 Folsom St.
San Francisco, California 94103 (415) 565-3197

FUNDING PERIOD: July 1, 1976 - December 31, 1977

OBJECTIVES

The overall project objective is to design, develop, and validate models for linking and coordinating vocational education programs of public and private postsecondary institutions with business, industry, and labor.

PROCEDURES

The general procedure to be followed is to adapt organizational linkage and coordination models derived from an analysis of relevant research and literature. The adaptation will be accomplished through the following stages: 1) describe goals, content and organizational characteristics of selected postsecondary vocational education programs and the goals, occupational programs, and organizational characteristics of identified selected organizations in business, industry, and labor; 2) determine the degree, scope, and intensity of congruence and compatibility of these groups through a comparative analysis of institutional goals, programs, and organizational characteristics; 3) design alternative configurations of program linkage and coordination, and select the most promising configuration(s); 4) construct a model for program linkage and coordination; 5) specify vocational and work experience and relevant curricula, means, methods, procedures, and resources by which to implement linkage and coordination; 6) develop specific linkage and coordination plans and make arrangements for implementation; 7) implement the program, test and assess the program's impact, and make adjustments as indicated by the assessment; and 8) disseminate/report the findings.

EXPECTED CONTRIBUTION TO EDUCATION

The overall result of the project will be the development, description, and documentation of empirically tested models for linking and coordinating postsecondary vocational education with business, industry, and labor. The generic characteristics of the models will be carefully defined and described in order to make the models applicable for use in a variety of educational settings in communities across the nation.

APPLICATION NUMBER: 498AH60316 GRANT NUMBER: G007603888

PROJECT TITLE: Research and Design Project for Disadvantaged Student Programs

PRINCIPAL INVESTIGATOR AND ORGANIZATION:

Richard Handley
Fresno City College
1101 East University Avenue
Fresno, California 93741 (209) 442-4600

FUNDING PERIOD: July 1, 1976 - December 31, 1977

OBJECTIVES

The project goal is to develop plans that would refine and improve the quality of programs and services for vocational education disadvantaged and physically handicapped students. The project is divided into four phases. Objectives of the first two phases are: Phase I, to conduct a needs assessment of the disadvantaged and physically handicapped (Phase I was completed in 1975); and Phase II, to design and field test in seven vocational education disciplines programs and services that will meet the "needs" identified in Phase I.

PROCEDURES

Following the education system planning analysis model developed in Phase I, Fresno City College will organize 62 instructors and 18 administrators into teams to receive training in System Approach for Education that will assist them in designing and field testing instructional programs and services, and management plans for disadvantaged and handicapped students.

EXPECTED CONTRIBUTION TO EDUCATION

1) An educational planning/management model that has been tested, along with a written report on successes and failures experienced.
2) Seven instructional field-tested programs including management plans.
3) Computer manuals for student audit, identification, followup and performance evaluation.

APPLICATION NUMBER: 498AH60261 GRANT NUMBER: G007603722

PROJECT TITLE: Adult Vocational Education Research and Related Activities

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Louise J. Keller and Lois W. Bennett
College of Education
University of Northern Colorado
Greeley, Colorado 80639 (303) 351-2941

FUNDING PERIOD: July 1, 1976 - June 30, 1977

OBJECTIVES

The project has three major thrusts: 1) conduct a series of literature searches and report findings; and, engage in three research studies; 2) plan, design, implement, and evaluate a Colorado Postsecondary Adult Cooperative Vocational Education Conference; and, 3) design and develop instructional modules for the improvement of content and delivery of university graduate-level introductory instruction in adult vocational education.

PROCEDURES

1) Produce four selected annotated bibliographies related to adult vocational education.
2) Complete three research studies entitled *Determination of the Status of Adult Cooperative Vocational Education Programs in Colorado Postsecondary Institutions*, *Assessment of Cooperative Agreements between Colorado Community Colleges, Area Voc-Tech Schools and Business, Industry, and Labor*, and *Development of an Instrument to Assess Employer Sponsored Career Development Programs for Sub-Professional Employees.*
3) Conduct a statewide conference to stimulate the development and/or expansion of adult cooperative vocational education at the postsecondary levels.
4) Produce three modules for university graduate-level introductory instruction to bring students with minimal preparation in adult vocational education to readiness for more indepth training. Assistance will be provided by project steering committee composed of representatives from Colorado's adult vocational education programs, business, industry, labor, and government.

EXPECTED CONTRIBUTION TO EDUCATION

The research findings should provide planners and designers of adult vocational education programs and services valuable input data for decision-making. The conference on Adult Cooperative Vocational Education should provide consensus on definitions, components, and criteria for adult cooperative programs; describe roles and role responsibilities for maintaining these programs and services; and expand adult cooperative vocational education significantly in Colorado. The instructional modules will enable a variety of teaching-learning options for both instructor and learner.

APPLICATION NUMBER: 498AH60284 GRANT NUMBER: G007603724

PROJECT TITLE: Project for Awarding College Credit for In-Service Training in Business and Industry

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Thomas N. Bavier, Coordinator, Extension Programs
Manchester Community College
P.O. Box 1046
Manchester, Connecticut 06040 (203) 646-2137

FUNDING PERIOD: July 1, 1976 - June 30, 1977

OBJECTIVES

1) Identify inservice training programs of businesses in Connecticut.
2) Evaluate such training for the purpose of offering college credit.
3) Award credit for inservice training and provide courses onsite.
4) Facilitate communication between the college and business and industry.
5) Assist Connecticut community colleges in developing similar programs.

PROCEDURES

The objectives of the project will be achieved through a three-phase plan of action. In the first month the philosophy and design of the project will be promoted through the media, a brochure, and personal contacts with businesses and related business organizations. Concurrently, data will be collected on existing inservice training programs and a list of target businesses will be developed. Personal contacts will then be made with top-level management in target businesses to implement the program.

EXPECTED CONTRIBUTION TO EDUCATION

The project will increase the accessibility of a college education to all segments of the labor force by awarding credit for inservice training and by providing courses onsite at a time convenient to employees. It will increase the types of courses available at the college. It will expand the facilities, equipment, and other resources of the college by combining resources of the college and business and industry. The project will bridge the gap between education and work by recognizing the legitimacy and worth of learning a trade or craft. It will provide an added incentive for employees who otherwise would not have continued their education.

APPLICATION NUMBER: 498AH60191 CONTRACT NUMBER: 300760269

PROJECT TITLE: Development of Procedures and Instruments for Assessing the Productivity and Impact of Post-Secondary Cooperative Education and Work Experience Programs

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Charles L. Blaschke
Education Turnkey Systems, Inc.
1030 15th Street, NW (#800)
Washington, DC 20005 (202) 293-5950

FUNDING PERIOD: July 1, 1976 - June 30, 1977

OBJECTIVES

The objectives of this project are to: 1) develop procedures and instruments for assessing the productivity and impact of postsecondary cooperative education programs; 2) develop training materials, including a manual and a workshop to train local cooperative education project directors to use the assessment procedures and instruments; and 3) pilot test these products.

PROCEDURES

This work builds upon a general design developed in 1976 under Part C for improving planning, management, and evaluation of cooperative education programs. The evaluation component of that design will be adapted to meet the special needs of postsecondary cooperative education program directors to focus on measures of productivity and impact, and to address the problems of sex and ethnic bias in cooperative education programs. Based on that design, procedures, instruments, a manual, and workshop materials will be fully developed and pilot tested. The project will proceed as follows: 1) review relevant postsecondary cooperative education documents and studies and interview local directors regarding evaluation needs; 2) revise the evaluation design to reflect special needs of postsecondary cooperative education programs and to focus on measuring productivity and impact (procedures for assessing both cost-effectiveness and program quality will be included); 3) develop specific procedures and instruments; 4) develop an instructional manual for use of the procedures and instruments; 5) develop guidelines for a training workshop in use of the procedures and instruments; and 6) pilot test products with a postsecondary cooperative education program.

EXPECTED CONTRIBUTION TO EDUCATION

As postsecondary cooperative education programs are increasingly being scrutinized in terms of impact and effectiveness, the procedures, instruments, evaluation manual, and accompanying workshop will assist local project directors in evaluating their programs and increasing their programs' productivity.

APPLICATION NUMBER: 498AH60142 GRANT NUMBER: G007603720

PROJECT TITLE: Proprietary Education: Alternatives for Public Policy and Financial Support

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Marcia Anderson, Asst. Professor, Vocational Education Studie
Southern Illinois University
Classroom Bldg., Rm 133
Carbondale, Illinois 62901 (618) 453-2620

FUNDING PERIOD: July 1, 1976 - June 30, 1977

OBJECTIVES

1) Complete a comparative analysis of vocational program offerings of both public postsecondary vocational education and resident proprietary institutions in Illinois.
2) Gather and analyze selected data on the characteristics of resident proprietary institutions in Illinois.
3) Conduct a feasibility study of alternatives for public utilization of resident proprietary school vocational program resources in Illinois-approved resident proprietary schools.
4) Publish a report incorporating the results of the above study activities along with recommendations for adjusting public policy so as to maximize the use of resident proprietary institutions in the State's postsecondary vocational education effort.

PROCEDURES

The study consists of four phases. Phase I will be conducted by mailed survey of those resident proprietary schools approved by the State of Illinois. The second phase will be the extensive review of literature to be used in two ways--determining the existing cooperation of public and private institutions, and helping to prepare the instrument to be used in phase III. Phase III will employ a stratified sample of the school directory developed in phase I and the instrument researched in phase II to conduct in-school visitation to determine school readiness and cooperation for public support or cooperative programs. Phase IV is the analysis of conclusions drawn from the above study activities and the development of project recommendations.

EXPECTED CONTRIBUTION TO EDUCATION

The final report tentatively titled *Proprietary Education: Alternatives for Public Policy and Financial Support* would summarize project findings. It would be disseminated widely within the state through formal organization channels, presentations to meetings of key professional groups and associations, and informally. The planned result would be adjustments in institutional practice, public policy, and legislation which would enhance both the amount and quality of postsecondary vocational efforts within Illinois.

APPLICATION NUMBER: 498AH60146 GRANT NUMBER: G007603321

PROJECT TITLE: The Special Vocational Education Needs of Women

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Ronald D. McCage, Director
Research and Development Section
Department of Adult, Vocational and Technical Education
Illinois Office of Education
100 N. First Street
Springfield, Illinois 62777 (217) 782-4620

FUNDING PERIOD: July 1, 1976 - December 31, 1977

OBJECTIVES

This project proposes a multifaceted dissemination scheme for providing school administrators, counselors, teachers, and students at the secondary and postsecondary level with materials for broadening the career horizons of young women in vocational education. The project has two very broad goals:

1) To provide a dissemination system that when implemented will provide staff in Illinois school districts with the tools necessary to eliminate common stereotypes that influence students' occupational preferences.
2) To provide all students and especially young women with the opportunity to make occupational choices unencumbered by outside social pressures.

PROCEDURES

A minicurriculum has been developed, field tested, and validated for students at grades 7-14 for the purpose of increasing students' awareness of the need for broadening the career horizons of women and at the same time, where possible, eliminate stereotyped thinking by young women and men. As a part of this project, awareness activities for preservice and inservice uses will be developed, and a 16 mm film for high school age youth will be developed and tested. Through a series of eight regional workshops, a copy of the curriculum and inservice will be provided for each secondary school and community college in Illinois, and self-evaluation instruments will be developed for districts to aid them in identifying counterproductive stereotypes in vocational education.

EXPECTED CONTRIBUTION TO EDUCATION

This activity will make an important contribution to the total program of vocational and technical education in Illinois schools by attacking, in a variety of ways, the counterproductive influences fostered by sex role stereotyping. Emphasis will be placed on working with each of the 650 secondary and community college districts that receive reimbursement for vocational education programs.

APPLICATION NUMBER: 498AH60318 GRANT NUMBER: G007603725

PROJECT TITLE: Identification of Exemplary Programs that Reduce the Dropout Rate from Vocational Education at the Postsecondary Level

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Robert L. Gibson
Indiana University Foundation
Counseling and Guidance
P.O. Box F
Bloomington, Indiana 47401 (812) 337-9385

FUNDING PERIOD: July 1, 1976 - June 30, 1977

OBJECTIVES

1) Identify exemplary programs that reduce the dropout rate from vocational and technical education institutions at the postsecondary level.
2) Evaluate these programs in terms of the development of relevant curricular offerings, supporting counseling and guidance services, and placement success.

PROCEDURES

1) A sampling of postsecondary vocational and technical education programs will be surveyed.
2) Exemplary programs will be indentified and data collected to describe these programs in terms of curriculum relevance, guidance and counseling program development, and placement effectiveness.
3) Data will be interpreted to determine appropriate conclusions, implications, and recommendations.

EXPECTED CONTRIBUTION TO EDUCATION

Reduction of the dropout rate from postsecondary and vocational education programs.

APPLICATION NUMBER: 498AH60060 GRANT NUMBER: G007603718

PROJECT TITLE: Identification and Development of Competency-Based Curriculum for Water and Wastewater Program

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Larry Willis, Director of Career Education
Kirkwood Community College
6301 Kirkwood Boulevard SW
Cedar Rapids, Iowa 52406 (319) 398-5498

FUNDING PERIOD: July 1, 1976 - December 31, 1977

OBJECTIVES

The major concern in water and wastewater training programs is to provide easy access to training and placement with minimum competencies in job skills, math, and reading. The following objectives support this concern:

1) Identify job/task and human relation competencies to enter the field.
2) Convert the existing curriculum to competency-based format.
3) Pilot the revised curriculum.
4) Develop a competency-based testing program.
5) Identify necessary competencies in math and reading to enter the field.
6) Develop and pilot multilevel variable entry-exit developmental reading and math programs.

PROCEDURES

With the assistance of an advisory committee, the instructional staff will complete a task analysis of basic job/tasks, math, and reading skills necessary to succeed in the Water and Wastewater field. The one-year curriculum will be redesigned based upon competency identification. The testing program will provide students an opportunity to test out or permit advanced placement.

EXPECTED CONTRIBUTION TO EDUCATION

The project addresses and seeks innovative solutions to problems of serious significance to any open door institution whose mission includes career education, lifelong learning, equal educational opportunities, and a strengthened cooperative relationship with local business and industry.

APPLICATION NUMBER: 498AH60116 GRANT NUMBER: G007603320

PROJECT TITLE: Common Intra-Cluster Competencies Needed in a Selected Occupational Cluster

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Ronald McClurg, Research Analyst
Des Moines Area Community College
2006 South Ankeny Boulevard
Ankeny, Iowa 50021 (515) 964-6418

FUNDING PERIOD: July 1, 1976 - December 31, 1977

OBJECTIVES

The purpose of this research effort is to identify a basic set of competencies within a broad occupational cluster that would permit a common teaching approach in postsecondary education. Specific objectives are to:

1) Select an appropriate occupational cluster and identify a set of occupations to be included.
2) Develop a roster of competencies which may be attained through training and validate those competencies through a survey of practitioners.
3) Cross-tabulate the competency rosters to identify the common instructional requirements of the included occupations.

PROCEDURES

Selection of the occupational cluster will be based upon analysis of several variables, including: graduate employment potential, student interest, availability of educational programs, and others as appropriate. Initial competency lists will be compiled from existing curriculum objectives, research reports, and professional society or organizational sources. These competencies (skills and understandings needed for success in the occupation) will be validated by submission to a random sample of practitioners in each field. Validated competency lists will be cross-tabulated to thus define commonality among occupations.

EXPECTED CONTRIBUTION TO EDUCATION

The significance of this project lies in the refinement of a research model having applicability to other similar research. Outcomes will provide an extensive validation of competencies needed in selected occupations as well as those common to a number of occupations in a cluster of job titles. Findings will provide a basis for additional educational research and may be utilized in curriculum revision, new program planning, personal career planning, and instructional evaluation.

APPLICATION NUMBER: 498AH60081 GRANT NUMBER: G007603719

PROJECT TITLE: The Research, Development and Testing of a Competency-Based System of Instruction for Four Post-Secondary Agriculture Technology Programs in Kansas

PRINCIPAL INVESTIGATOR AND ORGANIZATION:

Gary E. Jarmer
Northwest Kansas Educational Cooperative
135 West 6th
Colby, Kansas 67701 (913) 462-6781

FUNDING PERIOD: July 1, 1976 - December 31, 1977

OBJECTIVES

The goal of this Research and Development Project is to develop a model system for improvement of postsecondary agriculture technology programs through a competency-based instructional system. Specific objectives are to: 1) develop and field test a competency-based curriculum development system for four postsecondary agriculture programs in a rural area vocational technical school and a rural community college; 2) disseminate and further field test the developed system to other postsecondary schools in Kansas; 3) develop and field test a system of competency-based teacher inservice; 4) disseminate and further field test the developed inservice system to other postsecondary institutions; and 5) disseminate the developed systems to all Kansas institutions of higher education who offer teacher education programs in Vocational Education.

PROCEDURES

The project staff will collect competency-based curriculum materials which have been developed. Teachers will review the collected materials and use employers to validate those competencies selected as appropriate for their specific program. The project staff will initiate a needs assessment program to determine needed teacher competencies for each vocational program area. The inservice model will be developed to facilitate individual teacher progress in development of his competency-based curriculum. Dissemination efforts will be initiated to allow other areas of Kansas to participate in additional field testing activities.

EXPECTED CONTRIBUTION TO EDUCATION

Considerable expansion has occurred in the number of agricultural education offerings at the postsecondary level in Kansas. This project seeks to identify alternatives to presently used methods for preparing individuals with varying abilities for successful employment as teachers of 31 agriculture technology programs serving nearly 1,000 students in postsecondary institutions.

APPLICATION NUMBER: 498AH60189 GRANT NUMBER: G007603433

PROJECT TITLE: Development of Methods and Procedures to Identify and Adapt Technical Positions and Curriculum to Meet Industry Needs

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Clifford L. Rall
Vocational-Technical Education Specialist
Germantown Campus
Montgomery College
P. O. Box 280
Germantown, Maryland 20767 (301) 869-2800

FUNDING PERIOD: July 1, 1976 - June 30, 1977

OBJECTIVES

In this project we expect to devise methods of keeping informed of industry's needs within a specific technology, and to effect a plan to enable students to obtain jobs as soon as they are employable. The objectives are to establish within a specific technology methods and procedures to:

1) Enable a postsecondary institution to cooperate with industry in incorporating continuous curriculum changes as such needed changes become apparent.
2) Determine which general education requirements are necessary for employment.
3) Maintain an accurate file of immediately available and emerging jobs.
4) Determine the point in training when the student is able to get a job and continue training after work hours if desired.

PROCEDURES

The electromechanical curriculum will be utilized as a vehicle to demonstrate a suggested meshing of postsecondary technical training and on-the-job requirements. Representatives of approximately 50 industries, school personnel, and consultants will formulate practicable procedures.

EXPECTED CONTRIBUTION TO EDUCATION

It is expected that this research will demonstrate how industry and postsecondary education institutions can maintain a close relationship between school training and on-the-job working skills to enable trainees to get jobs in industries in which they are needed.

APPLICATION NUMBER: 498AH60264 **GRANT NUMBER:** G007603723

PROJECT TITLE: PROUD OPTION: Research in Support of Vocational Opportunities for Students Leaving Institutions

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Geoffrey C. Miller
The ALPHA Group (Formerly Massachusetts Center for Occupational Education)
40 Washington Street
Wellesley Hills, Massachusetts 02181

FUNDING PERIOD: July 1, 1976 - December 31, 1977

OBJECTIVES

Vocational programs training students leaving state institutions for community employment need critical linkage and support to succeed. In providing this support, PROUD OPTION will 1) evaluate the functioning levels of 56 institutional students and assess their vocational needs; 2) canvass the regional employment market and identify new job opportunities appropriate to student functioning levels; 3) assist the modification of vocational programs to mesh the training curricula with functioning levels necessary to achieve job competency; and 4) design and initiate a procedure to secure competitive or sheltered employment for individual students completing vocational training.

PROCEDURES

A student functioning profile will be written for an initial 56 institutional students and current job data on regional employment conditions and projections will be analyzed. Personal contact will be made with potential employers, a catalogue of possible occupations will be assembled, and a matrix developed showing the relationship between job performance statements and functioning levels of students. The collected data will be shared biweekly with the instructional staff of the vocational programs to adjust curricular objectives and activities to maximize training validity. The placement coordinators will be provided with updated information on potential employment. They will then place, supervise, and counsel the PROUD OPTION students in their work situations.

EXPECTED CONTRIBUTION TO EDUCATION

PROUD OPTION will develop materials useful to future efforts in vocational education for special needs students leaving institutions. The project will produce and distribute nationally a matrix of job skills interfaced with student's functioning levels and a manual on vocational curriculum modification and staff development to enable students leaving institutions to receive education in a vocational high school; job placement services will be implemented for the 56 PROUD OPTION students; and a variety of visual and graphic inservice tools for use in demonstrating task analysis techniques, curriculum modification, and job placement will be developed.

APPLICATION NUMBER: 498AH60201 GRANT NUMBER: G007605225

PROJECT TITLE: Cooperative Rural Career Guidance System. A system linking postsecondary and secondary educational institutions that provide vocational education programs and linking these programs with community business, industry, and labor.

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Charles E. Weaver
School of Education
Northern Michigan University
Marquette, Michigan 49855 (906) 227-2400

FUNDING PERIOD: September 1, 1976 - March 1, 1978*

OBJECTIVES

The combination of various factors specific to rural settings, such as geographic isolation, limited range of occupational exposure, and migration to urban centers, present unique problems in providing sound education and career guidance to secondary and postsecondary rural students. A career guidance program has been developed to meet these needs. This program will be used to achieve the following objectives: 1) field test a comprehensive career guidance system for rural schools at postsecondary educational institutions and their feeder schools with assistance from business, industry, and labor; 2) develop descriptions of existing cooperative agreements between educational institutions and industry, business, and labor; 3) develop guidelines for the establishment of new cooperative agreements between business, industry, and labor, and postsecondary and secondary educational institutions; 4) develop a set of case studies in the use of the cooperative rural career guidance system; and 5) conduct a national conference for State Department of Education personnel on the use of the cooperative rural career guidance system.

PROCEDURES

This project will be conducted in consortium with Northern Michigan University and the Ohio State Department of Education with leadership provided by The Center for Vocational Education. The national product field trial will occur in five states. Two postsecondary institutions, feeder secondary schools, and community representatives will be identified in each state.

EXPECTED CONTRIBUTION TO EDUCATION

1) Tested career guidance system training materials which have a high degree of transportability throughout rural areas of the country. 2) Case studies of 10 field site planning endeavors. 3) Exemplary community participation programs designed to link public institutions and those of business, industry, and labor for meeting the career development needs of rural youth.

*Funding received during the transition quarter.

APPLICATION NUMBER: 498AH60037 GRANT NUMBER: G007603865

PROJECT TITLE: Development, Implementation, and Evaluation of an Innovative Health Education Assistant Program

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Ruth Freedman
Office of Educational Development, Evaluation and Research
St. Mary's Junior College
2500 South 6th Street
Minneapolis, Minnesota 55454 (612) 332-5521

FUNDING PERIOD: July 1, 1976 - December 31, 1977

OBJECTIVES

The purpose of the project is to design, implement, and evaluate an innovative two-year associate degree program to prepare a health education assistant. Specific objectives are to:

1) Facilitate completion of the development of the program.
2) Develop the clinical/fieldwork portion of the program.
3) Develop learning resource materials for the program.
4) Evaluate the students and the curriculum.
5) Share with other educators the products generated as part of the program.
6) Describe the functions of the health education assistant.

PROCEDURES

The project funds will enable the Program Director to consult with additional faculty/outside personnel to continue development of a curriculum which is soundly developed with a conceptual framework, philosophy, terminal competencies, intermediate level competencies, and fully developed courses and modules. Provision is made in the program for both formative and summative evaluation. There is an operational plan for annual evaluation of the total program, which includes the plan itself, data from its use, and review by the Vice President, Coordinator of New Programs, and College Studies Committee.

EXPECTED CONTRIBUTION TO EDUCATION

This project relates directly to the development of new careers in fields of mental and physical health requiring less training than professional positions. Emphasis on health education cannot help but have an impact on the well-being of persons in our society. This worker has the potential of becoming an integral feature of that movement. The program would also serve persons who are already in one associate degree health program and wish to expand their skills and enhance their marketability.

APPLICATION NUMBER: 498AH60102 GRANT NUMBER: G007603955

PROJECT TITLE: A Procedure for Planning and Evaluating Senior High School Vocational Education Programs--Phase III (Project S.P.A.C.E.--Student Placement and Counseling Effort)

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
William E. Stock, Senior Consultant
Division of Vocational-Technical Education
Minnesota Department of Education
550 Cedar Street
St. Paul, Minnesota 55101 (612) 296-2421

FUNDING PERIOD: July 1, 1976 - December 31, 1977

OBJECTIVES

This project addresses the problem area of providing assistance to high school students and early leavers in making a smooth transition from high school to some type of meaningful and relevant postsecondary activity. The general objectives for the project are to:

1) Increase the number of in- and out-of-school youth and potential dropouts who become committed to some type of career goal or postsecondary activity.
2) Increase the degree of satisfaction students derive from their choice of a postsecondary activity.
3) Increase the number of students who respond positively towards the counseling, placement, and instructional services provided by the school.
4) Increase the awareness of employers, parents, and faculty about the services provided by the S.P.A.C.E. project.

PROCEDURES

The project is being conducted at four sites in Minnesota; namely, a suburban school, an urban school, a comprehensive school, and a secondary cooperative center. Followup data is used to provide baseline information for planning and evaluation. Career counseling, instruction in job seeking skills, and placement services (educational and job) are provided to students. Project activities are implemented at each of the sites through the efforts of a full-time placement officer and half-time placement counselor.

EXPECTED CONTRIBUTION TO EDUCATION

The materials and processes developed from the project will be disseminated to the 437 school districts in the state. Utilization of the system and/or its component parts will provide services to students heretofore not served in making the transition to the world of work.

APPLICATION NUMBER: 498AH60061 GRANT NUMBER: G007604277

PROJECT TITLE: Individualization of Instructional Materials

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Joe King, Jr.
Jackson State University
1325 Lynch Street
Jackson, Mississippi 39217 (601) 968-2472

FUNDING PERIOD: September 1, 1976 - August 31, 1977

OBJECTIVES

This project will provide individualized professional education with computer-assisted instruction for vocational personnel. Specific objectives are to: 1) perform task analysis, develop curriculums, and establish behavioral objectives; 2) use modern techniques of program development; 3) design instructional material in reaching established behavioral objectives; 4) practice human relation skills in dealing with program personnel and others involved in vocational programs; and 5) develop instruments for measurement of teacher competencies which will have implications for other systems.

PROCEDURES

The School of Industrial and Technical Studies will design and prepare a delivery system to conduct the necessary training. College credit will be provided by the university as a recognized teacher training institution. Individualized instruction will utilize the procedure for "Individually Diagnosed and Prescribed Instruction". The learning objectives are clearly specified and methods of instruction have been developed to enable learners to attain those objectives with computer-assisted instruction. Students will be required to obtain their prescription and evaluation results on a weekly basis from a central location. Reports will include the pretest and posttest achievement for enrollees. Upon program completion, each student will be evaluated by self evaluation, supervisor, and outside consultants.

EXPECTED CONTRIBUTION TO EDUCATION

With minor modifications this program can be used in the future to foster self-renewal and upgrading of other vocational teachers who may need such training at some time during their career due to changes brought about by research and technology. The State of Mississippi may use this approach to retrain vocational teachers already employed.

APPLICATION NUMBER: 498AH60066 GRANT NUMBER: G007603864

PROJECT TITLE: Develop and Field Test Criteria, Instruments, and Procedures to Evaluate Vocational Educational Programs in Metropolitan Community Colleges of Kansas City, Missouri

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Sue Dueitt
The Metropolitan Community Colleges of Kansas City
560 Westport Road
Kansas City, Missouri 64111 (816) 756-0220

FUNDING PERIOD: September 1, 1976 - August 31, 1977

OBJECTIVES

The Metropolitan Community Colleges (MCC) evaluation project will develop data collection instruments and procedures for implementing and field testing the following curriculum evaluation model, which is based upon the outcome information needs of the institution and its stated goals for vocational education:

Criteria:

		Points
1)	Program's relationship to job market profile	20
2)	Program's level of community support	20
3)	Program's success in meeting vocational aspirations of clientele	20
4)	Program's success in terms of student performance	20
5)	Program's cost effectiveness	10
6)	Program's success in reaching handicapped and disadvantaged	10
		100

PROCEDURES

Because of the pervasive nature of the evaluation model, a great deal of information must be collected and analyzed. Over 10,000 questionnaires will be mailed, and the responses keypunched and verified. Information will be extracted from a number of computer data bases such as the student information file, master course file, payroll file, space and equipment inventory file, etc. New programs must be written before the computer can organize the survey data, integrate it with existing data bases, and score each program according to the six criteria of the model.

EXPECTED CONTRIBUTION TO EDUCATION

The MCC evaluation project is a simple, objective approach to a highly complex problem. First, the evaluation scale is easy to understand. Second, the scale has relevance since it is based upon MCC's information needs and stated goals. Third, the scale is comprehensive and realistic in incorporating social, economic, and political factors. Fourth, the model calls for objective and consistent comparison of each curriculum against established criteria. And fifth, the model can be implemented within a year at a relatively low cost.

APPLICATION NUMBER: 498AH60165 GRANT NUMBER: G007603911

PROJECT TITLE: Develop and Mediate 72 Modules and Develop Capability To Reproduce and Distribute Mediated Materials

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Marvin R. Fielding
State Fair Community College
1900 Clarendon Road
Sedalia, Missouri 65301 (816) 826-7100

FUNDING PERIOD: July 1, 1976 - December 31, 1977

OBJECTIVES

Goals and objectives for this project are to:

1) Develop and field test 72 individualized instructional modules in four occupational areas.
    a) Ascertain the content for 72 modules and individualize the modules.
    b) Field test the modules at four cooperating institutions.
2) Develop a media center to mass-reproduce individualized materials and disseminate these materials.
    a) Reproduce instructional materials and mediate modules with original photography, audio and graphic arts.
    b) Develop state and regional marketing channels for the material.

PROCEDURES

Organize an advisory council to aid in the selection of 18 modules in each of the four career areas (Business and Office, Health Occupations, Welding, and Agri-Business) to be individualized or revised and set a priority for development. Develop material into the module format complete with objectives, information pages, activity sheets, pretests, posttests, and media. Prepare a student packet, instructor guide, and one form of media for each module. Develop introductory modules and sponsor statewide workshops. Distribute brochures describing materials available, and disseminate these materials at 10 percent over cost.

EXPECTED CONTRIBUTION TO EDUCATION

1) The production of 18 modules in each of four occupational areas which will be individualized for student self-pacing.
2) The development of a dissemination system and distribution channels to Missouri as well as regional institutions.
3) The promotion of workshops to train instructors in the use of individualized materials.
4) Improvement of instruction through the use of competency-based individualized materials.
5) The development of materials which may easily be used by special needs persons.

APPLICATION NUMBER: 498AH60094 GRANT NUMBER: G007604307

PROJECT TITLE: A Study of the Comparison of the Benefits of Secondary and Post-Secondary Vocational Education

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
William J. Nelson
Montana State Department of Public Instruction
State Capital
Helena, Montana 59601 (406) 449-3126

FUNDING PERIOD: July 1, 1976 - December 31, 1977

OBJECTIVES

The study will attempt to develop techniques for obtaining information from students and employers to assess the appropriateness and adequacy of training in vocational and technical education programs. The major thrust of the study will be to identify the economic, psychological and sociological benefits accrued to program completers.

PROCEDURES

1) Assessment instruments will be developed through research of existing instruments and through the use of consultants.
2) Interviewers will be employed and trained to interview former students and their employers.
3) Population will be randomly selected and stratified into treatment and nontreatment groups of approximately 1,190 subjects.
4) Data will be collated and analyzed through inferential statistical technique, and conclusions and recommendations formulated.

EXPECTED CONTRIBUTION TO EDUCATION

The project will be educationally significant since it should reveal the benefits of vocational education which encompass more than job placement, i.e., sociological and psychological benefits. If these benefits do exist, then the implications are clear for changing program goals and curriculum to strengthen those desirable benefits which may be identified.

APPLICATION NUMBER: 498AH60239 GRANT NUMBER: G007603869

PROJECT TITLE: Ocean County Vocational Technical Schools/Ocean County College Articulation Plan for Career Development

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Frank W. Adam, Director of Career Development
Ocean County Vocational Technical Schools
Old Freehold & Bey Lea Roads
Toms River, New Jersey 08753 (201) 349-8425

FUNDING PERIOD: July 1, 1976 - June 30, 1977

OBJECTIVES

This project will develop a viable career education process which will provide students with next-step options for career development. This will be accomplished by the following: 1) expansion of present Career Resource Center; 2) extension of Career Resource Center to Ocean County College; 3) survey business and industry in Ocean County in order to develop a needs assessment for curriculum resources and potential job placement; 4) hire additional personnel to develop learning units and a transportable presentation describing the project; 5) make business, industry, and the community aware of the project and how it will help them; 6) develop an articulation model to meet the needs of students; 7) develop a career option program; 8) study and analyze the anticipated need for career ladder programs; and 9) institute a career education administrative and staff organization system to organize, operate, monitor, and evaluate a comprehensive career education program.

PROCEDURES

The objectives will be accomplished through workshops for education, business, industry, and the community. There will also be a great deal of individual and group counseling. Survey instruments will be developed to determine the needs of students, business, and industry. The results of these surveys will provide information for developing student profiles and feasibility studies by the County College on which career areas they need to develop. There will also be trips to business and industry by students to expand experiences out of school classrooms. This relationship will also enable speakers from the business and industry world to visit the various trade classes and speak to our students.

EXPECTED CONTRIBUTION TO EDUCATION

Development of a total effort of public education and the community toward career education through joint planning on the part of administrators, teachers, counselors and a broad range of community representations in Ocean County. This effort will unite business, industry, and education in a program geared to identify and meet the needs of the entire community. It will be flexible and open to every person desiring career information.

APPLICATION NUMBER: 498AH60011 GRANT NUMBER: G007603862

PROJECT TITLE: Feasibility of Developing Post High School Technical Training Programs for Emerging Energy Sources in the Southwestern United States

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Everett Edington
Professor of Educational Management and Development
New Mexico State University
Box 3N
Las Cruces, New Mexico 88033 (505) 646-2623

FUNDING PERIOD: August 15, 1976 - February 14, 1978

OBJECTIVES

1) Determine how emerging energy policies in the Southwest relate to manpower needs.
2) Identify emerging energy sources in the Southwest.
3) Identify possible manpower needs in each emerging energy field.
4) Identify levels of training needs for each identifiable occupation.
5) Select two or three of the more promising emerging energy occupations, and:
    a) Identify specific skills needed for the occupation.
    b) Develop instructional modules for the two or three most promising energy occupations.

PROCEDURES

1) Governmental agencies, University Research Centers, and Energy Industries in the Southwest will be contacted to determine most promising emerging energy sources.
2) Personal interviews will be made with each source identified in Arizona and New Mexico to determine emerging occupations.
3) Instructional modules will be developed for one or two of the most promising occupations.

EXPECTED CONTRIBUTION TO EDUCATION

The results of the study will enable manpower specialists and vocational educators to better plan for providing trained manpower in emerging energy occupations.

APPLICATION NUMBER: 498AH60205 GRANT NUMBER: G007603868

PROJECT TITLE: An Empirical Study of Decisions Involving Post-Secondary Vocational School Training

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Lawrence S. Olson
Department of Economics
University of Rochester
Rochester, New York 14627 (716) 275-3895

FUNDING PERIOD: July 1, 1976 - August 31, 1977

OBJECTIVES

The purpose of this study is to analyze how and why people choose vocational school training and to estimate the short and long-term effects of this training. Specific objectives are to: 1) determine the ways in which vocational school decisions affect and are affected by decisions about other training and about work, 2) estimate the effects of policy alternatives (changes in tax laws, loan and scholarship availability, etc.) on these decisions, and 3) examine similarities and differences between members of target groups (inner-city and rural students, program dropouts) and others as regards training choices and predicted effects of policies on these choices.

PROCEDURES

The project will combine statistical analysis of three large national data sources with insights of field personnel. Decision functions for vocational training, college, and work will be estimated using data on young persons; short-term effects of training will be analyzed on a slightly older group; and long-term effects will be examined on a middle-aged group. Inclusion of policy variables (e.g. availability of federally insured loans) in the estimated decision equations will allow predictions and projections of effects of policy changes. Separate estimation or use of appropriate interaction terms will provide indications of differences between target and nontarget groups. Field personnel will be used to explain the results and make them more precise.

EXPECTED CONTRIBUTION TO EDUCATION

Both a technical and nontechnical final report will be provided. The technical report should improve teaching and research about this training; the nontechnical report should aid practitioners and upgrade career guidance. For all uses, the characteristics of the project--explicit treatment of target groups, joint analysis of vocational school training and work, use of long-term earnings data, and direct estimates of effects of policy variables--will enhance existing knowledge. Vocational schools serve over three million students per year, grossing over $2.5 billion; the study should increase our understanding of this training.

APPLICATION NUMBER: 498AH60113 GRANT NUMBER: G007603866

PROJECT TITLE: A Model of Articulated Counseling Services for Post Secondary Programs

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Don Eshelby, Director
Research Coordinating Unit
North Dakota State Board for Vocational Education
900 East Boulevard
Bismarck, North Dakota 58505 (701) 224-3195

FUNDING PERIOD:

This project will develop a model for counseling services to be utilized by all postsecondary institutions for the purposes of:

1) Reducing the dropout and non-completion rates in vocational education programs.
2) Providing better service to rural area students in vocational education programs.
3) Assessing the impact of existing vocational education programs on North Dakota Industry and Manpower.

PROCEDURES

The model will be developed from information obtained about existing programs. Material to be considered will be obtained from any recognized supportive program to enable the project director to combine effective strategies into a fully articulated program which will encompass elements of student needs, individualized instructional philosophies, employment practices and needs, and regular program offerings. Student needs, background, and ability will be matched with program offering, industry need, and education and community services as identified by counselor-administered questionnaires and survey techniques.

EXPECTED CONTRIBUTION TO EDUCATION

The model developed under this study will be used as the program to be offered in all postsecondary institutions in North Dakota under the direction of the Vocational Guidance office. It will serve as the vehicle for counseling services to all students in those institutions. As such, it will provide a comprehensive program to meet the needs of all students in postsecondary programs as well as a source of information for industry and community personnel.

APPLICATION NUMBER: 498AH60200 GRANT NUMBER: G007605242

PROJECT TITLE: Development and Validation of Competency Based Instructional Systems for Adult, Post Secondary, Special Needs, and Entrepreneurship via the IDECC System

PRINCIPAL INVESTIGATOR AND ORGANIZATION:

Larry Casterline
Interstate Distributive Education Curriculum Consortium (IDECC), Inc.
The Ohio State University
119 Townshend Hall
1885 Neil Avenue
Columbus, Ohio 43210 (614) 422-4202

FUNDING PERIOD: July 1, 1976 - December 31, 1977*

OBJECTIVES

The purpose of this project is the further development and validation of the Interstate Distributive Education Curriculum Consortium (IDECC) system.

PROCEDURES

Using the current IDECC system as the nucleus, this project will develop and validate the following:

1) A competency-based adult distributive education instructional system.
2) A competency-based postsecondary instructional system.
3) A competency-based special needs instructional system.
4) Competencies for new and additional occupations in marketing and distribution.
5) A competency-based learning system for entrepreneurship.

EXPECTED CONTRIBUTION TO EDUCATION

The educational significance is that IDECC is considered by many educators as the first comprehensive instructional system available to teachers on the secondary level. With the end results of the project, a comprehensive system can be available to educators in adult, postsecondary, and special needs education.

*Funding received during the transition quarter.

APPLICATION NUMBER: 498AH60203 GRANT NUMBER: G007605052

PROJECT TITLE: Cooperative Rural Career Guidance System. A system linking postsecondary and secondary educational institutions that provide vocational education programs and linking these programs with community business, industry, and labor.

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Harry N. Drier, Specialist
The Center for Vocational Education
The Ohio State University
1960 Kenny Road
Columbus, Ohio 43210 (614) 486-3655

FUNDING PERIOD: October 1, 1976 - March 31, 1977*

OBJECTIVES

The combination of various factors specific to rural settings, such as geographic isolation, limited range of occupational exposure, and migration to urban centers, present unique problems in providing sound education and career guidance to secondary and postsecondary rural students. A career guidance program has been developed to meet these needs. This program will be used to achieve the following objectives: 1) field test a comprehensive career guidance system for rural schools at postsecondary educational institutions and their feeder schools with assistance from business, industry, and labor; 2) develop descriptions of existing cooperative agreements between educational institutions and industry, business, and labor; 3) develop guidelines for the establishment of new cooperative agreements between business, industry, and labor, and postsecondary and secondary educational institutions; 4) develop a set of case studies in the use of the cooperative rural career guidance system; and 5) conduct a national conference for State Department of Education personnel on the use of the cooperative rural career guidance system.

PROCEDURES

This project will be conducted in consortium with Northern Michigan University and the Ohio State Department of Education with leadership provided by The Center for Vocational Education. The national product field trial will occur in five states. Two postsecondary institutions, feeder secondary schools, and community representatives will be identified in each state.

EXPECTED CONTRIBUTION TO EDUCATION

1) Tested career guidance system training materials which have a high degree of transportability throughout rural areas of the country. 2) Case studies of 10 field site planning endeavors. 3) Exemplary community participation programs designed to link public institutions and those of business, industry, and labor for meeting the career development needs of rural youth.

*Funding received during the transition quarter.

APPLICATION NUMBER: 498AH60219 GRANT NUMBER: G007603930

PROJECT TITLE: Entrepreneurship for Post-Secondary Institutions

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Lorraine Furtado, Specialist
The Center for Vocational Education
1960 Kenny Road, The Ohio State University
Columbus, Ohio 43210 (614) 486-3655

FUNDING PERIOD: August 1, 1976 - January 31, 1978

OBJECTIVES

This project builds upon a previous project that developed a 40-hour course of 22 modularized, instructional units for postsecondary vocational-technical students, entitled "Introduction to Entrepreneurship". It continues the previous effort with the following objectives: 1) design and develop a modularized, performance-based course of instruction entitled "Becoming an Entrepreneur", that is an articulated extension of the course, entitled "Introduction to Entrepreneurship"; 2) plan, conduct, and evaluate two inservice workshops designed to motivate and capacitate 30 instructors from selected postsecondary schools in Ohio to teach both courses; 3) design and conduct a formative evaluation (field test) of both courses of study for the specific purposes of improving the instruction of entrepreneurship; 4) revise both courses based upon field test findings; and 5) prepare and conduct a dissemination plan that includes technical assistance to Ohio's postsecondary institutions and the distribution of information throughout the nation.

PROCEDURES

The project will develop a second 40-hour course of instruction in entrepreneurship that is modularized, experiential, performance-based, and coupled to an abundance of resource materials. Both courses will be field tested with a pre/posttest design and revised on the basis of the findings. Two 2-week workshops for 30 instructors will be conducted for teachers introducing the material in their schools. An advisory council of entrepreneurs will be used in the development and evaluation of the instructional materials. A dissemination plan will be recommended to the Office of Education to make the materials available at the conclusion of the project.

EXPECTED CONTRIBUTIONS TO EDUCATION

This project is designed to help move vocational-technical instruction into the development of employers as well as employees at the postsecondary level. It will provide a full year of tested instructional materials in entrepreneurship and recommended inservice programs to use with teachers "across the board" in vocational-technical education. It will also address the dissemination task so that these instructional materials can be disseminated throughout the nation.

APPLICATION NUMBER: 498AH60252 GRANT NUMBER: G007603870

PROJECT TITLE: Competency Based Curricula Development for the Mining and Related Industries

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Bryan V. Fluck, Executive Director
Admiral Peary Area Vocational-Technical School
Route 422 West, R.D. #2
Ebensburg, Pennsylvania 15931 (814) 472-6655

FUNDING PERIOD: July 1, 1976 - June 30, 1977

OBJECTIVES

The grant provides for the further development and refinement of curricula for the occupations in and related to the mining industry. Specific objectives are to:

1) Prepare task sheets for the mining and related occupations as listed in the *Dictionary of Occupational Titles (DOT)*.
2) Develop a curricula that is competency-based, modularized, and individualized.
3) Implement an already tested process of involving technical advisory committees in the formulation of the specific tasks in the curriculum.
4) Develop and implement methods for curricula dissemination.

PROCEDURES

A position of curriculum specialist, directly responsible to the project director, will be established. The curriculum specialist will be responsible for coordinating the meetings of the technical advisory committees, and for establishing communication links between these committees, the faculty, and the writers and illustrators who will be employed under this grant. Curriculum will be developed according to the *DOT*-based Times System developed and tested previously. Faculty in the mining and related areas will work with the technical advisory committees for 1 to 2 weeks at a time.

EXPECTED CONTRIBUTION TO EDUCATION

1) A complete curricula for the mining occupations will be made available for the first time.
2) A system for the continual education at postsecondary levels for adult students involved or about to be involved in mining will be made available.
3) Materials aimed at developing instructional staffs in the mining and related occupations will be made available and utilized.

APPLICATION NUMBER: 498AH60114 GRANT NUMBER: G007603867

PROJECT TITLE: Vocational Education Module.
Rhode Island Educational Management Information System

PRINCIPAL INVESTIGATOR AND ORGANIZATION: Frank M. Santoro, Deputy Assistant Commissioner
Rhode Island Department of Education
22 Hayes Street
Providence, Rhode Island 02908 (401) 277-2691

FUNDING PERIOD: July 1, 1976 - June 30, 1977

OBJECTIVES

The goal of this project is to effect significant refinement and revision in the Vocational Education Module in order to improve the responsiveness of the system to user needs, and to provide managers at all levels with better and more complete information on vocational education. Objectives are to:

1) Review in depth the current input/output structure of the student and financial subsystems.
2) Make modifications needed to these subsystems, and initiate data collection activities required to operationalize the Vocational Module.
3) Evaluate the performance of the system in meeting the users' requirements and accuracy of reported data.

PROCEDURES

1) Agencies offering vocational training programs at the adult and/or postsecondary level will be selected as pilots, plus one local district offering vocational training at the elementary/secondary and adult levels.
2) A task force will be convened consisting of representatives of the pilot agencies, the Department of Education and possibly Governor's Manpower Office, to review, recommend, and implement the revisions to the current system.
3) The task force will evaluate the impact of the system on the planning, management, and control of vocational education programs in the pilot agencies.

EXPECTED CONTRIBUTION TO EDUCATION

This system will assist the Educational Management to monitor and make predictions about manpower needs of industry; the existing labor pool; available financial and educational personnel resources; student performance and achievement; marketability, both long and short-term, of students having been enrolled in training; population trends; industrial growth patterns; and deployment of allocated resources.

APPLICATION NUMBER: 498AH60014 GRANT NUMBER: G007604261

PROJECT TITLE: South Dakota Vocational Education Follow-Up

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Keith Stover
South Dakota Department of Education
Division of Vocational Education
State Office Building No. 3
Pierre, South Dakota 57501 (605) 369-2643

FUNDING PERIOD: July 1, 1976 - June 30, 1977

OBJECTIVES

The purpose of the project is to develop a model adapted to South Dakota to be utilized in followup of graduates from the postsecondary vocational-technical programs in South Dakota. The specific purposes of the FY 77 project are to:

1) Revise the followup instruments based on results of FY 76 project.
2) Collect data from postsecondary program graduates, process it by computer, and disseminate results.
3) Develop followup instruments for secondary vocational education program graduates and field test these instruments.
4) Compile a "Salary Survey" using salary data taken from the first and fifth year postsecondary followup questionnaires.
5) Develop a placement instrument to notify the vocational institutions of placement opportunities.

PROCEDURES

The instruments will be revised and/or developed utilizing input from the Project Director, the State vocational staff and the local institutions' administration and staff. The revised instruments will be utilized to followup the one year and fifth year graduates and their employers. The data gathered will be processed through a computer analysis system. The results of the followup will be published in a format usable by the State and institutional personnel and will be distributed to the appropriate personnel.

EXPECTED CONTRIBUTION TO EDUCATION

The project will result in the development of a statewide coordinated followup system that will become an ongoing part of every vocational education program in South Dakota. The data gathered through the followup system will assist in making administrative, policy, supervision, and curriculum decisions on a more objective basis.

APPLICATION NUMBER:	498AH60246	GRANT NUMBER:	G007603972

PROJECT TITLE: Installation and Assimilation of Educational Innovations in Vocational/Technical Programs

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Oscar G. Mink
University of Texas at Austin
Austin, Texas 78712 (512) 471-7551

FUNDING PERIOD: July 1, 1976 - December 31, 1977

OBJECTIVES

Relatively little research has been directed within community colleges to an examination of the factors which facilitate or inhibit successful incorporation of innovation. It is the intent of this project to do an analysis of one of the most extensive efforts to introduce educational innovation to vocational instructors in community colleges in Texas, the introduction of individualized instruction. More than half of the community colleges in Texas participated over four years ago in specially tailored training efforts to provide vocational/technical instructors with the necessary skills to individualize their course offerings.

PROCEDURES

One of the two major thrusts of the study will be to survey vocational technical instructors who participated in that training experience in order to ascertain the extent to which individualized instruction is currently incorporated in their teaching efforts. Individual instructor innovation and institutional variables will be examined in an effort to identify factors contributing to the current status of teaching methodologies employed. The second major thrust of the research will be an effort to successfully install an educational innovation within a target community college through the use of experimental procedures considered promising by the investigators. These procedures will involve primarily the formation and use of an action research team, a diagonstic review of the institution, and examination of the leadership styles of relevant administrative personnel.

EXPECTED CONTRIBUTION TO EDUCATION

These procedures may serve as a prototype for use by community college and other postsecondary institutions in the installation of educational innovations in vocational-technical education.

APPLICATION NUMBER: 498AH60223   CONTRACT NUMBER: 300760466

PROJECT TITLE: An Analysis of the Participation of Women in Training for Non-Traditional Occupations in Area Vocational Technical Schools, and Factors Which Influenced Their Decision to Enter and Remain in Such Training: Phase II, Secondary Schools

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Roslyn D. Kane, President
Rj Associates, Inc.
1018 Wilson Boulevard
Arlington, Virginia 22209 (703) 524-3360

FUNDING PERIOD: October 1, 1976 - September 30, 1977

OBJECTIVES

The purpose of this research is to examine the decisionmaking process of women selecting nontraditional vocational training in order to identify the crucial factors influencing their final training selection, and to identify educational programs and counseling techniques which have influenced them. Phase I of this project produced a vast quantity of information on postsecondary women in nontraditional vocational training. Phase II focuses on women enrolled in such training at the secondary level. A specific objective will be to identify the differences in crucial decisionmaking factors between secondary women in nontraditional training and those in other secondary vocational training. Comparisons will also be made between women presently in secondary training and those in postsecondary training.

PROCEDURES

Nontraditional occupational programs offered at the secondary level will first be identified. A sample of schools offering these courses will be asked to distribute questionnaires to women students enrolled in nontraditional training programs and to a control group. Questions will be asked on socio-demographic characteristics, educational experiences, and the role educational personnel and other persons played in decisionmaking. Educational personnel that women identify as very influential in their training selection will be contacted and requested to provide information concerning programs which support a student's vocational decision and factors they consider crucial in students decisionmaking.

EXPECTED CONTRIBUTION TO EDUCATION

Information provided by this project will assist vocational education programs to recruit more women for training in nontraditional occupations. The information will enable educational personnel and policymakers to be better able to facilitate bias-free choices by young women selecting vocational training.

APPLICATION NUMBER: 498AH60183 GRANT NUMBER: G007604416

PROJECT TITLE: The Systems Approach to Assessment & Evaluation of Post Secondary Vocational Education Programs

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
John D. Hartz, Project Associate
Wisconsin Vocational Studies Center
Box 49, 305 Education Building
Madison, Wisconsin 53706 (608) 363-3679

FUNDING PERIOD: October 1, 1976 - March 31, 1977*

OBJECTIVES

The purpose of the project is to develop materials which can assist local postsecondary educators in planning and evaluating program components designed to facilitate acquisition of the nonjob task skills necessary to obtain and maintain employment. Specifically, the objectives include 1) determination of the personal, interpersonal, and social skills necessary for job acquisition and survival; 2) development and field testing of an omnibus instrument/methodology designed to assess competencies in the determined skills; and 3) development of procedural guides for utilization of instrument in localized program planning and evaluation.

PROCEDURES

1) Literature search and review to identify the critical nonjob task skills.
2) Localized program-specific survey of educators, employed and unemployed program completers and dropouts, and employers of former students to validate and/or augment the findings obtained in the literature search.
3) Search and evaluation of existing procedures designed to assess the critical skills identified.
4) Design of new instruments/methodologies as needed.
5) Draft and field test of an omnibus instrument/methodology.
6) Administration of the field-tested instrument to former students of specific programs in order to construct models and standards of employability for those occupations.
7) Design of procedural guides on instrument utilization.

EXPECTED CONTRIBUTION TO EDUCATION

The project efforts will generate the following products:

1) *Review and Synthesis of Literature and Research in Job Securing and Job Maintaining Skills.*
2) *Assessing Employability* - field tested instrument/methodology.
3) *Guide to Effective Use of the "Assessing Employability" Instrument.*

Successful achievement of the project goals should contribute to postsecondary vocational education's goal of improving employability and employment prospects for students and former students.

*Funding received during the transition quarter.

APPLICATION NUMBER: 498AH60030 GRANT NUMBER: G007603863

PROJECT TITLE: Study of the Characteristics on Employment Needs in the Drug and Pharmaceutical Industry in the Arecibo-Manati Area of Puerto Rico

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
José Lema Moya
Vocational Technical and Skills Education Program
Puerto Rico Department of Education
Cesar Gonzalez and Calaf Streets
Hato Rey, Puerto Rico 00910 (809) 765-5850

FUNDING PERIOD: July 1, 1976 - June 30, 1977

OBJECTIVES

This research study will determine employment needs in the drug and pharmaceutical industry located in the Arecibo-Manati area to establish the foundations for curriculum development at the technical level.

PROCEDURES

The study will be conducted in two phases. Phase I will take place during the first year (1976-77) and Phase II will be developed in the second year (1977-78). Phase I exclusively will deal with the gathering of data. During this stage, the Vocational, Technical, and High Skills Education Programs will identify and appoint the human resources needed and initiate coordination with other public agencies who will collaborate with the project. Phase II of the project will be developed during the second year. Job analysis charts will be used as base for curriculum development. Course outlines, subject descriptions, instructional units, teacher and student guides and learning modules will be prepared, tested, reproduced, and disseminated to all Technological Institutes where programs related to the drug and pharmaceutical industry will be established or strengthened.

EXPECTED CONTRIBUTION TO EDUCATION

1) Technological Institutes in Puerto Rico will benefit from a complete course of study specially designed to train youths and adults in the area of drug and pharmaceuticals.
2) Job analysis charts for each occupation related to the drug and pharmaceutical industry will be developed to provide a basis for program planning and development.
3) People already employed in drug and pharmaceuticals could be retrained in specific skills needed in the drug and pharmaceuticals industry.
4) The gap between school and work will be minimized by promoting cooperation between public education and manpower agencies.

PART C: RESEARCH

Priority: Individualization and Modularization of Instructional Materials

APPLICATION NUMBER: 498AH60290 GRANT NUMBER: G007603818

PROJECT TITLE: A Feasibility Study for Providing an Array of Vocational Modules for Individualized Vocational Education for Each Student in a Navajo Tribal-Operated Community School

PRINCIPAL INVESTIGATOR AND ORGANIZATION:

Dillon Platero
The Navajo Tribe
Navajo Division of Education
P.O. Box 308
Window Rock, Arizona 85515 (602) 871-4941

FUNDING PERIOD: July 1, 1976 - December 31, 1977

OBJECTIVES

The Navajo Tribal Council seeks to improve Indian education comprehensively and Navajo education specifically. The intent is to conduct a study of the feasibility of planning, developing, operating, and evaluating an array of vocational modules that will provide an individualized occupational program for each secondary school youth and adult enrolled in the proposed Navajo Community School.

PROCEDURES

1) Produce an administrative report on the educational feasibility of the proposed array of vocational modules.
2) Complete the analysis and coding of all viable programs and materials
3) Finalize the program catalog including all such resources.

EXPECTED CONTRIBUTION TO EDUCATION

The proposed feasibility study will enable the Navajo Department of Education to conduct preliminary research activities that invariably are short-circuited or totally ignored in planning most educational institutions.

APPLICATION NUMBER: 498AH60022 GRANT NUMBER: G007603807

PROJECT TITLE: The Delivery and Field Testing of a Computer Managed Delivery System for Multioccupational Programs in Vocational Education

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Nevin R. Frantz, Jr., Associate Professor
Occupational Education Department
University of Delaware
Newark, Delaware 19711 (302) 738-2573

FUNDING PERIOD: September 1, 1976 - June 30, 1977

OBJECTIVES

1) Develop a computer-based system to deliver and manage an individualized instructional approach for multioccupational programs.
2) Field test the computer-based instructional system with a selected group of students and teachers in an area vocational-technical high school.

PROCEDURES

The development of the system will involve computer programming for input and output of instructional modules. Procedures for scheduling students, providing instructional feedback, and monitoring student progress will also be accomplished. The completed system will be field tested to refine procedures and determine the feasibility of providing multioccupational approach for use with vocational education teachers and students.

EXPECTED CONTRIBUTION TO EDUCATION

The project will provide a model for delivering instruction via a computer-based system and will determine the feasibility of providing instruction for job entry competencies in several occupational areas.

APPLICATION NUMBER: 498AH60198 GRANT NUMBER: G007603814

PROJECT TITLE: Development and Validation of a Competency-Based Preservice/Inservice Learning System for Vocational Teachers in the Implementation and Management of a Curriculum Delivery System for Individualizing Vocational Education

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
C. Virginia Bert
Division of Vocational Education
Department of Education
Tallahassee, Florida 32304

FUNDING PERIOD: June 30, 1976 - June 29, 1977

OBJECTIVES

Specific project objectives are: 1) an analysis of the Florida Curriculum Delivery System Model and its components to determine instructional objectives in performance terms and development of criterion-referenced measures to assess individual mastery of those objectives; 2) review, selection, and adaptation of existing instructional materials; 3) development of new instructional materials; 4) formative evaluation and revision of adopted and developed instructional materials with two target populations: instructors of special needs groups and instructors of regular vocational students; 5) development of an instructors manual; 6) final production of a validated learning system for use in inservice and preservice training programs of vocational teachers as they individualize instruction.

PROCEDURES

The development and validation of the learning system would occur in three phases. Phase I: The curriculum delivery system model and procedural manuals developed for implementation will be analyzed to identify objectives. A task analysis of system objectives will be conducted to determine instructional objectives, and criterion-referenced measures developed to assess attainment of instructional objectives. A comprehensive review of existing instructional materials to identify those which match instructional objectives will be conducted. Multimedia modules to develop competencies will be developed. Phase II: Materials will be evaluated by small groups of teachers representing secondary, postsecondary, and special needs student populations. Concurrently an instructor's course management guide will be developed. Phase III: The production of the complete learning system for an instate tryout followed by a revision and production of the final product.

EXPECTED CONTRIBUTION TO EDUCATION

The major outcome of the project will be a completely modularized, individualized learning system to train teachers in the management and implementation of a competency-based, individualized model for vocational instruction.

APPLICATION NUMBER: 498AH60082 GRANT NUMBER: G007603811

PROJECT TITLE: The Development, Field Testing and Evaluation of Individualized Instruction Programs in Selected Vocational Occupations

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Russell Clark
Georgia State Department of Education
Office of Adult and Vocational Education
Room 309, State Office Building
Atlanta, Georgia 30334 (404) 656-6711

FUNDING PERIOD: July 1, 1976 - December 31, 1977

OBJECTIVES

The objectives of this project are to:

1) Develop an individualized instructional system for each of several vocational education program areas.
2) Field test the materials in each program.
3) Evaluate each program.
4) Study the feasibility of utilizing computer-assisted instruction in at least one program.

PROCEDURES

Four individualized instructional programs will be developed and field tested at the secondary level: agriculture (gardening and grounds-keeping), graphic arts, auto body repair, and electronics. Three individualized instructional programs will be developed and field tested at the postsecondary level: data processing, graphic arts and entrepreneurship. Each program will have potential for interface with programs at other levels. In field testing, the project staff will consider the site selection and the actual field testing of curriculum. The secondary data processing program will be adapted to a form of computer-assisted instruction suitable for use as a pattern for other programs. A model for continuous revision of existing systems of individualized instruction will be developed and implemented to insure the least possible lag between schools and industry for determining and teaching saleable skills and attitudes. An evaluation system will be designed and utilized to validate all instructional materials developed and to evaluate the overall instructional system function and design. The evaluation plan will provide for both process and product evaluation which is both formative and summative in nature.

EXPECTED CONTRIBUTION TO EDUCATION

An effort will be made to establish a system of developing individualized instruction that will serve as a model for all vocational curriculum development in the State.

APPLICATION NUMBER: 498AH60084 GRANT NUMBER: G007603812

PROJECT TITLE: Research in Individualized Vocational Education Programs for Small, Isolated, Rural Schools

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
George Y. Omura, Director
Research Center of Hawaii
2879 Paa Street, Rm. 207
Honolulu, Hawaii 96819 (808) 833-2434

FUNDING PERIOD: September 1, 1976 - August 31, 1977

OBJECTIVES

1) Development of instructional materials in an occupational area, including prototypes, designed for small, rural, isolated secondary schools.
2) Field testing of the developed instructional materials in a small, isolated, rural secondary school.
3) Utilization of the developed materials as a model for the development of instructional materials in other occupational areas.

Using the developed instructional materials, the learner will be able to:
  1) Progress through the materials at his own rate of learning.
  2) Complete each competency-based instructional module with 100 percent accuracy.
  3) Express preference for the individualized instructional materials over other materials experienced in the past.

PROCEDURES

The instructional materials package will be developed by the grantee organization and field tested in a small, isolated, rural, secondary school. The instructional materials will be designed as modularized learning units in one occupational area to provide the learner with job skills for a specific occupation within a job cluster. The learning units will also be designed so that classroom teachers without specific training in vocational education will be able to implement the learning activities. The completed materials and procedures will be used as a model for development of learning units in other occupational areas. The sample for the field test will be students in grades 10-12.

EXPECTED CONTRIBUTION TO EDUCATION

The developed materials will be used as a model for the development of modules in other occupational areas. A minimum of seven small rural schools (involving about 1,143 students in grades 10-12) will be able to provide learning experiences in career education utilizing the materials modeled after the project prototype.

APPLICATION NUMBER: 498AH60151 GRANT NUMBER: G007603813

PROJECT TITLE: An Individualized Model for a Differentiated Secretarial Single Skills Lab

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Jack Gualdoni, Dean of Technical/Vocational Education
Elgin Community College
1700 Spartan Drive
Elgin, Illinois 60120 (312) 697-1000

FUNDING PERIOD: July 1, 1976 - October 1, 1977

OBJECTIVES

The purpose of this project is to develop and evaluate 25 single skill secretarial individualized modules which will prepare students to enter the world of work for the first time, to upgrade their current job skills, or to regain skills acquired several years ago. Specific objectives are to: 1) develop 25 individualized single skill modules of competency-based performance; 2) statistically test the achievement of students in the treatment groups versus students in the control groups; 3) develop diagnostic tests related to single skills; 4) develop, administer, and test prevocational guidance elements; 5) develop and test computer-managed student tracking record procedures; and 6) enroll 60 to 80 students in the single skills labs during the first 16 months.

PROCEDURES

After completing a comprehensive literature review, ECC's professional staff will develop specified measurable behavioral objectives. The maintenance staff will convert an existing lab into an individualized single skills lab by rewiring and moving partitions. Learning packages will then be assembled with emphasis on multimedia activities. Diagnostic tasks for each of the single skills modules will be developed and nonsexist, nondiscriminatory information will be disseminated to the public. Counseling and admissions staff will be informed of the goals and problems inherent in self-paced learning experiences. An estimated 30 students (control group) and 30 students (treatment group) with matched characteristics will be enrolled in the lab. Staff will track individualized student progress in both groups using pretesting, evaluation instruments, and record keeping procedures. Summative assessment will take place involving final testing of both groups and collection of information from students, staff and employers.

EXPECTED CONTRIBUTION TO EDUCATION

The project addresses and seeks a creative solution to the problem of providing instructional delivery systems oriented to the diverse populations which are attracted to community college technical programs. In addition, this approach would seem to have value to educators in other career education areas, to educators concerned with life-long learning, and to those agencies concerned with equal education opportunities.

APPLICATION NUMBER: 498AH60238 GRANT NUMBER: G007603815

PROJECT TITLE: Assessment of an Individual's Job Related Skills and Knowledges

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Edgar E. Hornback
Indiana State Board of Vocational and Technical Education
17 West Market - Room 401
Illinois Boulevard
Indianapolis, Indiana 46204 (317) 633-7675

FUNDING PERIOD: July 1, 1976 - December 31, 1977

OBJECTIVES

1) Participate with the Vocational Technical Education Consortium of States (V-TECS) to acquire methodologies and technical services to research three domains including validating tasks performed on the job, writing performance objectives, and writing criterion-referenced measures.
2) Provide inservice education for vocational teacher educators and vocational administrators relevant to the use of V-TECS curriculum research and information for program planning.
3) Develop and field test methodologies and materials for individualized assessment of student achievement including all tasks to be performed for six job titles.
4) Disseminate 12 individualized assessment packages to vocational teacher educators, vocational administrators, and vocational teachers.

PROCEDURES

1) Develop two domain catalogs of performance objectives and criterion-referenced measures using the V-TECS development process of surveying job incumbents and writing performance objectives with professional writing teams.
2) Provide workshops for inservice education relevant to V-TECS research for curriculum and program planning for teachers, educators, and administrators.
3) Establish assessment model development teams to develop model methods and instruments using V-TECS research for assessment of student achievement.
4) Contract with the Indiana Curriculum Materials Center to print and disseminate assessment model packages to vocational educators.

EXPECTED CONTRIBUTION TO EDUCATION

1) Three V-TECS catalogs including at least one job title in each of three domains.
2) Inservice education evaluation report using V-TECS for program planning.
3) Six model assessment packages based on V-TECS catalogs.
4) Dissemination of 4,800 model assessment packages.

APPLICATION NUMBER: 498AH60258 GRANT NUMBER: G007603816

PROJECT TITLE: Development and Field Testing of Individualized and Modularized Instructional Materials for Vocational Education

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Bruce Carpenter
Kentucky Bureau of Vocational Education
Capital Plaza Tower
Frankfort, Kentucky 40601 (502) 564-3775

FUNDING PERIOD: July 1, 1976 - December 31, 1977

OBJECTIVES

1) Develop approximately 300 modules for five competency-based programs to accompany catalogs of objectives and criterion-referenced measures in selected occupational areas.
2) Field test the instructional modules in 10 field test sites.
3) Revise the instructional modules based on the evaluation information received from the field test program.

PROCEDURES

1) An analysis of present curriculum needs will be conducted.
2) Writing teams will be identified for use in the writing process.
3) Inservice education activities will be conducted for the writing teams to assure the development of uniform and high quality curriculum materials.
4) The writing teams will, in a workshop setting and through individual efforts, develop the modules.
5) Field test sites will be selected with each program being tested at two sites. Thus, 10 field test sites will be needed.
6) Inservice education activities will be conducted for all field test teachers.
7) Instructors and students will evaluate materials and make suggestions for improvements.
8) Modules will be revised based on field test input.

EXPECTED CONTRIBUTION TO EDUCATION

The instructional modules developed in this project will directly improve the programs of 1,200-1,500 vocational students each year. In addition, the skills secured by approximately 30 writers will serve as a catalyst for the improvement of curriculum development skills of all teachers in Kentucky.

APPLICATION NUMBER: 498AH60026 GRANT NUMBER: G007603605

PROJECT TITLE: A Project to Develop Performance-Based Instruction Through Task Analysis and In-Service Programs

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Harry J. Boyer, Director of Administrative Services
Bureau of Vocational Education
Louisiana State Department of Education
P. O. Box 44064, Capitol Station
Baton Rouge, Louisiana 70804 (504) 389-2312

FUNDING PERIOD: July 1, 1976 - December 31, 1977

OBJECTIVES

1) Design a system of choosing a catalog for development based on labor market analysis, student interest, and state and consortium priorities.
2) Develop a comprehensive inservice education program in the use of catalogs and a model for dissemination of catalogs within the State.
3) Develop learning activities in each instructional area under development.

PROCEDURES

A model has been developed for studying germane literature, developing task lists, surveying incumbent workers, designing computer analysis of worker surveys, and conduct of inservice training. As the project is initiated, the model will provide the structure for the occupational analysis for the occupational clusters selected for inclusion in the project. Persons to be surveyed by mail and personal interviews are incumbent workers in Louisiana in each of the following occupational areas: domestic services, diesel mechanics, meat cutting, bank clerk, and retail credit. The project would become an integral part of Louisiana's curriculum development in the selected occupational fields.

EXPECTED CONTRIBUTION TO EDUCATION

The results and benefits of this project could have a substantial impact on the training, retraining, and upgrading of skills of workers involved in the selected occupational areas, as well as application at the secondary and postsecondary levels.

APPLICATION NUMBER: 498AH60038 GRANT NUMBER: G007603808

PROJECT TITLE: Individualized Modularized Vocational Education Incorporating Multiple Learning Strategies

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Jan Danford, Director
Ingham Intermediate School District
Capital Area Skill Center
611 Hagadorn Road
Mason, Michigan 48854 (517) 676-3302

FUNDING PERIOD: July 1, 1976 - December 31, 1977

OBJECTIVES

1) Develop learning strategies that will enable educable mentally impaired (EMI), visually impaired, nonreading, and regular vocational education students to achieve specified objectives.
2) Write modules without sex bias that portray women and minorities in nontraditional roles, incorporating identified strategies.
3) Identify environmental modification needed for physically handicapped students.
4) Field test and evaluate modules and the instructional management system.

PROCEDURES

This project will establish a profile for educable mentally impaired students, visually impaired, and nonreading students, and regular students based on each group's communication skills, attitudes, knowledge level, and cultural and social factors. An analysis of each group's decoding skills and the channels of communication that will elicit appropriate responses from students will be made to determine the most effective strategies to employ in designing instructional modules. Each vocational task will be analyzed to determine appropriate methods of coding and channels of communication available to transmit the message to the students. Matching the strategies available and those that will enhance achievement of objectives by a given group of students will result in modules that will help overcome the barriers confronting students.

EXPECTED CONTRIBUTION TO EDUCATION

1) One thousand three hundred vocational education instructional modules that incorporate alternative learning strategies for EMI, visually impaired, nonreading, and regular students to achieve vocational objectives.
2) Student profiles for EMI, visually impaired, nonreading, and regular vocational education students.
3) Environmental modifications for physically handicapped students to remove physical barriers to achievement of objectives.

APPLICATION NUMBER: 498AH60041 GRANT NUMBER: G007603809

PROJECT TITLE: Alternative Approaches to Individualization in Vocational Education

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
John R. Faust
Kenne State College
Cheshire House
Winchester Street
Kenne, New Hampshire 03431 (603) 352-1909

FUNDING PERIOD: July 1, 1976 - December 31, 1977

OBJECTIVES

1) Test five selected individualized instructional programs by comparing the number, variety of students served, and quality of these programs with existing similar traditional group instruction programs.
2) Identify the organizational, program, and teacher characteristics within each of these individualized instruction programs, and disseminate this information to all secondary and postsecondary vocational education programs.

PROCEDURES

Using an instructional development model system and the five selected individualized instruction sites, the project staff will aid local program representatives in organizing and strengthening their successful ongoing programs. The project staff will then identify successful comparable group instruction programs. A comparison matrix will be developed, and interpreted results will be disseminated to all area vocational facilities.

EXPECTED CONTRIBUTION TO EDUCATION

The project will:

1) Produce five well-organized ongoing individualized instruction model programs.
2) Produce a critical path in designing, implementing, and testing individualized instruction for New Hampshire.
3) Show how individualized programs can serve more and a greater variety of students with a broader range of individualized needs.
4) Improve the emphasis on efficient curriculum development in the eyes of secondary and postsecondary vocational administrators statewide.

APPLICATION NUMBER: 498AH60229 GRANT NUMBER: G007603927

PROJECT TITLE: Cooperative Research and Development of Curriculum in Applied Vocational English and Math

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
George S. Lulos, Jr.
Director of Career Education
Glassboro State College
Glassboro, New Jersey 08028 (609) 445-5201

FUNDING PERIOD: July 1, 1976 - December 31, 1977

OBJECTIVES

English and math as subject areas represent basic skills necessary to people in all types of jobs, but communication and computation skills must be presented in terms of their applications on the job to keep the interest of vocational students. Therefore, the project will: 1) develop applied English and math instructional modules in cassette/slide packages for individualization, 2) pilot test, revise, and field test the materials, and 3) develop correlated inservice programs in support of implementation of the materials.

PROCEDURES

Phase 1: Design and produce instructional units by teams of Glassboro State College faculty and Vineland Public School teachers, with special provisions for prevention of sexual, racial, and other stereotyping.
Phase 2: Implement and pilot test the materials. Continue the inservice foundation through the association and meetings of the college-school district teams.
Phase 3: Revise and field test the materials in several school settings. At the same time, field test the inservice program as preparation for the field test of materials.

EXPECTED CONTRIBUTION TO EDUCATION

We hope to have some indication of answers to the following questions:

1) By presenting math and English in terms of their trade applications, do we increase student interest, motivation, and/or achievement?
2) By using cassette/slide packages as a delivery system, do we individualize with good effect, and do we free teacher time for more detailed individualization?
3) Can vocational teachers adapt to using individualized materials in basic skill areas, and can they make the linkages between math and English and their trades?

APPLICATION NUMBER: 498AH60057 GRANT NUMBER: G007603981

PROJECT TITLE: Instructional Support System for Occupational Education (ISSOE)

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Edna C. Cardish
Office of Occupational and Continuing Education
New York State Education Department
Albany, New York 12230 (518) 474-5836

FUNDING PERIOD: July 1, 1976 - December 31, 1977

OBJECTIVES

Development of a modularized, performance-based occupational education curriculum by means of an established, workable model will continue with validation by representatives of education, the job market, and other data sources serving as criteria. Modularized curriculum tools will be applied to individualized student needs. Additional teachers will be given training which will result in production of at least two new curriculum products in foods and building industry trades. The curriculum produced will be transported to additional teachers in the areas of automotive mechanics and office training.

PROCEDURES

Utilizing the partnership model developed through a VEA FY'74 Federal grant, new members will be included in the process and products network. Utilizing established procedures, teachers entering the training cycle for the first time will be trained through special workshops in appropriate skills for modularized curriculum development including module planning, performance objectives, criterion-referenced measurements, critique of modules and structuring of differentiated learning activities. Curriculum development will proceed at project sites under the direction of curriculum coordinators who will schedule, conduct, and assume leadership of local meetings.

EXPECTED CONTRIBUTION TO EDUCATION

Measurement of the results and effectiveness of the modularized curriculum tools of instruction in terms of student performance will be made. Student achievement profiles will be compiled and available for use in counseling, reporting, and employability efforts. Students will be provided with a record of achievement at the conclusion of their instruction. The products developed will be tested, transported, and evaluated by teachers using them for the first time. Process and design of the project will be the basis for determining statewide program implementation for the future.

APPLICATION NUMBER: 498AH60051 GRANT NUMBER: G007603810

PROJECT TITLE: Individualization and Modularization of Office Occupations and Trades and Industry Materials

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Arthur K. Jensen, Director and Professor of Education
Vocational Education Media Center
Clemson University
109 Freeman Hall
Clemson, South Carolina 29631 (803) 656-3116

FUNDING PERIOD: July 1, 1976 - December 31, 1977

OBJECTIVES

The purpose of this project is to implement competency-based education in the areas of bookkeeper, bank teller, automotive mechanic, and carpenter utilizing criterion-referenced measures identified from V-TECS catalogs. The objectives are:

1) Conduct an exhaustive search for multimedia individualized instructional materials, implementation models, materials design models, and models for training and retraining teachers in the implementation and management of such materials in the selected areas of instruction.
2) Evaluate, select, modify, and/or design and develop materials and models.
3) Train participating personnel (administrative, instructional, and aides) in the field test locations in implementation, effective utilization, and management of the individualized instructional system.
4) Initiate an evaluation program utilizing a model designed for, and presently being tested in South Carolina, an Appalachian Regional Commission project for implementation in FY79.

PROCEDURES

Objectives listed in the V-TECS catalogs will be sequenced and categorized into training levels. Existing individualized instructional materials will be searched, evaluated, refined and developed for applicability to effective instruction of these criterion referenced measures. A program will be developed to field test the final product.

EXPECTED CONTRIBUTION TO EDUCATION

Over 13,000 students in over 760 classes are enrolled in the four subject areas involved in this project in 1976-77. This project will provide the means of introducing effective competency-based education into the vocational programs of the State, improve the quality of education, introduce the open entry/open exit concept, allow for individual differences, and develop an effective evaluation of graduates.

APPLICATION NUMBER: 498AH60153 GRANT NUMBER: G007603926

PROJECT TITLE: Modularizing Instructional Materials Using Applications of Technical Concepts

PRINCIPAL INVESTIGATOR AND ORGANIZATION:

Daniel M. Hull
Technical Education Research Center-Southwest
4201 Lake Shore Drive
Waco, Texas 76710 (817) 772-8756

FUNDING PERIOD: July 1, 1976 - December 31, 1977

OBJECTIVES

The purpose of this project is to identify, develop, field test, and disseminate a series of short modules which illustrate applications for the Unified Physics Concepts. The module will enable students to relate and apply fundamental concepts of physics to practical problems encountered by technicians.

PROCEDURES

Technical Education Research Center-Southwest will organize a small, competent staff and use four teams to produce modules and/or field test the material. Teams composed of faculty, employer organizations, and technical specialists will be located throughout the country. Technical Education Research Center-Southwest staff will 1) organize the teams; 2) identify the module matrix; 3) meet with teams periodically to review; 4) edit and revise drafts; 5) perform clerical and administrative functions; 6) prepare an instructor's guide; 7) prepare revised modules for publication; and 8) liaison with additional schools and employers.

EXPECTED CONTRIBUTION TO EDUCATION

The principal benefit is increased flexibility of technical programs by any institution desiring to modernize its physics program. Modular instructional material may also be used to supplement an ongoing program or convert it to the Unified Concepts approach. The "technical core" curricula are in emerging occupations and its students will find job opportunities which are not stereotyped according to sex. The use of modular instructional material could ultimately result in new combinations of physical facilities. Use of modular materials can help break down artificial lines between institutional divisions.

APPLICATION NUMBER: 498AH60276 GRANT NUMBER: G007603817

PROJECT TITLE: Development of Learning Modules for Machine Shop Occupations

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Kent Randall, Professor and Chairman
Manufacturing Engineering Technology
Weber State College
3750 Harrison Blvd.
Ogden, Utah 84408 (801) 399-5941

FUNDING PERIOD: September 1, 1976 - May 31, 1977

OBJECTIVES

Phase III of this project will complete the final one-third of the machine shop skill individualized learning modules and therefore have a completely individualized program in the machine shop occupational cluster. Validation of all the machine shop individualized instructional units developed in Phase I and Phase II will also be completed. The project will clearly identify 1) the 30 percent of the skills in each career level of the machine shop occupational cluster that takes 70 percent of the employee's time on the job and which the student must perform at the "articulation" level of psychomotor development; 2) the 20 percent of the skills in each career level of the machine shop occupational cluster that takes 10 percent of the employee's time on the job and which the student will be required to perform at the "precision" level of psychomotor development; and 3) the 50 percent of the skills in each career level of the machine shop occupational cluster that takes 10 percent of the employee's time on the job and which the student will be required to perform at the "manipulation" level of psychomotor development.

PROCEDURES

Two regular faculty who are experienced and proficient both in teaching and in producing individualized instructional units will write necessary modules on a full-time basis for nine months. The 70 to 75 learning units would be completed by June, 1977, and validated during autumn semester in the fall of 1977. Support services in typing and technical illustrating will be provided on a regular basis. The learning units completed in Phase I (approximately 150) will be validated in a minimum of two high school and three postsecondary environments during college year 1976-77.

EXPECTED CONTRIBUTION TO EDUCATION

These learning modules can be used in any high school and postsecondary training program in the country. A teachers guide (management system) that identifies which modules are necessary for each machine tool career code in the occupational cluster, the recommended sequence for teaching, and the psychomotor level of development (articulation, precision, or manipulation) for each skill task will be developed.

PART C: RESEARCH

Priority: Special Needs Populations

APPLICATION NUMBER: 498AH60283 GRANT NUMBER: G007604051

PROJECT TITLE: Multivariate Analysis of the Bilingual Vocational Education Program

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Jeanne T. Landis
Los Angeles Harbor College
1111 South Figueroa Place
Wilmington, California 90744 (213) 835-0161

FUNDING PERIOD: July 1, 1976 - June 30, 1977

OBJECTIVES

The purpose of the project is to provide validated, quantified information for implementation of a cost-effective comprehensive program of instruction and services tailored to the particular educational needs of the multilingual communities as they exist. Specific objectives are:

1) A quantitative measure of the relative contribution of each component and combination of components of bilingual vocational education to the successful achievement of participants will be obtained through statistical analysis of 200 NLOE (Natural Language Other Than English) students' performance and progress.
2) An assessment model which will enable NLOE students to be counseled into placement in course levels appropriate to their linguistic skills will be developed through discriminant analysis of 1976-77 NLOE student achievement.
3) Attitudes toward NLOE students' performance held by instructors in the program will show a significant positive shift in the 1976-77 school year because of the validation of program effectiveness by component assessment.

PROCEDURES

Students from Samoan, Spanish, and Tagalog-speaking communities will be recruited, provided career planning, and enrolled in an integrated bilingual vocational skill development program. Program components will include career counseling, a bilingual vocational skill course, and cooperative education courses. Detailed records of service and progress will be maintained for each student. Multivariate analysis (squared semipartial correlations and beta weights) will be used to assess the relative contributions to successful achievement of the services and attitudinal factors of the institution.

EXPECTED CONTRIBUTION TO EDUCATION

A validated model which quantifies the efficacy of adapted, coordinated services in contributing to successful achievement for NLOE students will be most valuable to planning. It provides a first step in accommodation required to fulfill the obligation to equalize educational opportunity for bilingual populations.

APPLICATION NUMBER: 498AH60293 **GRANT NUMBER:** G007604705

PROJECT TITLE: Overcoming Barriers to Mainstreaming: A Problem-Solving Approach

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Peter R. Dahl, Associate Research Scientist
American Institutes for Research
P.O. 1113
Palo Alto, California 94302 (415) 493-3550

FUNDING PERIOD: August 1, 1976 - January 31, 1978*

OBJECTIVES

The purpose of this project is to provide useful information to vocational educators seeking to mainstream handicapped students. Specific project objectives are to: 1) assess the barriers to mainstreaming as seen by vocational education professionals and identify ways to prevent or overcome these barriers; 2) prepare a guidebook, acceptable to the vocational education community, that will assist vocational educators in identifying and overcoming barriers to mainstreaming; 3) disseminate the guidebook widely in the vocational education community; and 4) prepare the final report so that it constitutes a valuable guide to research and development planning.

PROCEDURES

An advisory panel of vocational educators will identify significant barriers that they face in mainstreaming. Based on their recommendations and a literature review, a survey form will be developed for distribution to administrators, counselors, and placement specialists to determine how they overcome barriers to mainstreaming in vocational education. Based on these data, a guidebook will be developed to help vocational educators to improve their services to mainstreamed handicapped students. Efforts will be made to disseminate the guidebook through commercial publication, the Educational Resources Information Center (ERIC), and professional meetings.

EXPECTED CONTRIBUTION TO EDUCATION

By emphasizing realistic solutions to practical problems, the guidebook will help vocational educators to mainstream handicapped students.

*Funding received during the transition quarter.

APPLICATION NUMBER: 498AH60332 GRANT NUMBER: G007604319

PROJECT TITLE: Teaching Job Survival Skills to Youthful Offenders: A Needs-Assessment and Curriculum Development Project

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Mark Wiederanders, Research Analyst II
California Youth Authority
714 P Street, Room 800
Sacramento, California 95814 (916) 445-1143

FUNDING PERIOD: July 1, 1976 - December 31, 1977

OBJECTIVES

The high unemployment rate among youth released from correctional detention is caused in large part by general attitudes, habits, and interpersonal practices which inhibit success in finding as well as keeping jobs. To strengthen these job survival skills, objectives are to: 1) identify, using a sampling technique, real-life problems that youth are having on parole relating to job survival, and deficiencies among incarcerated youth that will likely result in similar problems on parole; 2) develop and implement a modularized job survival skills curriculum to address these deficiencies and problems; and 3) assess the effectiveness of the curriculum.

PROCEDURES

Instruments to reveal needs in the area of job survival skills will be developed and administered to two samples: 100 incarcerated youthful offenders, and 100 offenders on parole. A modularized curriculum will be developed to address these needs. The curriculum will be field tested at one Youth Authority institution. Any improvements in scores on survival-skills tests, as well as improvements in actual employment rates on parole, will be measured against those of a control group of offenders from the same facility.

EXPECTED CONTRIBUTION TO EDUCATION

Assuming that the field test will demonstrate the effectiveness of the job survival skills curriculum, the California Youth Authority, serving approximately 4500 persons, will implement the program system-wide. The product will be completely transportable and will hopefully be used in correctional settings throughout the United States. The ultimate hoped-for impact will be a significant improvement in employment rates and productive citizenship among ex-offenders.

APPLICATION NUMBER: 498AH60056 GRANT NUMBER: G007604313

PROJECT TITLE: Career Aspiration and Self-Congruence in the Education of Puerto Rican Youth

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
James S. Cohen, Educational Consultant
Area Cooperative Educational Services (ACES)
800 Dixwell Ave.
New Haven, Connecticut 06511 (203) 872-2569

FUNDING PERIOD: July 1, 1976 - August 31, 1977

OBJECTIVES

1) Assess need of Puerto Rican youth in the areas of career aspiration and self-congruence through the Piers Harris Self Concept Scale and the Comprehensive Career Assessment Scale.
2) Develop a pilot career awareness/orientation curriculum for use in bilingual schoolrooms.
3) Implement the pilot curriculum and evaluate its effect on student progress in the researched areas.
4) Assess student progress as a result of the exposure to the program.

PROCEDURES

Sampling procedures, test preparation, and curriculum development will be implemented following the selection of an advisory panel. A pilot curriculum will be developed by a team of educators, parents, and business people, and implemented for six weeks with bilingual Puerto Rican students 13 to 16 years old. These students comprise approximately 10 percent of the student body of one of Hartford's middle schools. Evaluation of the curriculum and measurement of student progress will be made. Student assessment instruments will be utilized in a pretest and posttest research design. During the course of the project, community meetings will be scheduled and close coordination with the Hartford school system will be maintained. Efforts will be made by the Connecticut State Department of Education to implement the research findings through their training programs in vocational education.

EXPECTED CONTRIBUTION TO EDUCATION

This research will provide relevant, practical information dealing with the education of Puerto Rican youth in the Hartford, Connecticut school system. Approximately 9,500 children will be directly affected. Other contributions will include: decrease in the number of dropouts within the experimental group; increased teacher awareness concerning the research variables; increased awareness of vocational education as a means to attain future goals; and data from which to draw inferences and information for the development of relevant programing in this area.

APPLICATION NUMBER: 498AH60166 GRANT NUMBER: G007604050

PROJECT TITLE: Research and Development of Instructional Booklets for Vocational Educators for Mainstreaming the Handicapped

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Robert E. Fowler
43 Norman Hall, College of Education
University of Florida
Gainesville, Florida 32611 (904) 392-0755

FUNDING PERIOD: July 1, 1976 - December 31, 1977

OBJECTIVES

The purpose of this project is to research and develop self-instructional materials for changing attitudes and procedures of educators and administrators regarding integrating handicapped students into vocational education programs. The specific objectives are to: 1) develop five booklets describing handicapped students in regular vocational education classes; 2) disseminate the final products to vocational and teacher administrators; 3) establish a statewide advisory committee to assist in the development and dissemination of the project materials; and 4) evaluate the project.

PROCEDURES

1) Conduct a state needs assessment of vocational educators concerning the mainstreaming of the handicapped by analyzing previous vocational education workshops, interviewing vocational educators, reviewing the literature, establishing a state steering committee for direction, and finalizing the "Needs Assessment Inventory" for administration.
2) Draft, field test, and print booklets for dissemination to vocational educators and administrators in the State of Florida.

EXPECTED CONTRIBUTION TO EDUCATION

Titles of the five booklets to be developed and disseminated are: 1) *Integration of Handicapped Students into the Regular Vocational Education Program,* 2) *Vocational and Educational Characteristics of the Handicapped Learner,* 3) *Identification and Placement of the Handicapped Learner in a Vocational Education Setting,* 4) *Architectural Considerations and/or Modifications in the Design and Use of the Instructional Setting,* and 5) *Administrative Considerations for the Special Needs Learner in a Vocational Education Setting.* In addition to the booklets, product evaluation summaries, product dissemination summaries, a final report, project consultants report, and a bibliography will be delivered to the government.

APPLICATION NUMBER: 498AH60053 GRANT NUMBER: G007604434

PROJECT TITLE: Vocational Rehabilitation of the Hearing Impaired Mentally Retarded (HIMR)

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Ronald Anderson, Education Administrator
Dixon Developmental Center
2600 North Brinton Avenue
Dixon, Illinois 61021 (815) 288-5561 EXT. 416

FUNDING PERIOD: October 1, 1976 - September 30, 1977

OBJECTIVES

The literature indicates that throughout the United States assessment tools specifically designed for the HIMR population are nonexistent. Therefore, this project has the following objectives:

1) A Rehabilitative Skill Inventory (RSI) directed toward the vocational behavior of the HIMR and already in informal use at our facility will be formalized and provided with written instructions for administration.
2) The RSI will be administered to a group of institutionalized HIMR, an institutionalized nonhearing impaired mentally retarded group, and a community-based group of HIMR.
3) Scores in the RSI will be compared to performance on measures of intellectural ability, adaptive behavior, and vocational competency. Pre-and post-training differences will be analyzed, and the composition of the test will be examined statistically for characteristics of inter-rater reliability, stability, internal consistency, and scalability.

PROCEDURES

The project will select a target population composed of 33 HIMR students. In addition, two control groups will be established, one consisting of HIMR students residing in the community and the other of institutionalized nonhearing impaired mentally retarded students. All students will be evaluated on the RSI and other pertinent assessment tools on a pretest and posttest basis. Curricula for these groups will be reviewed prior to the project. During the project, training procedures and living environment will be replicated to the greatest degree possible. All the performance data for the RSI and other assessment tools will be evaluated and analyzed in order to validate the RSI.

EXPECTED CONTRIBUTION TO EDUCATION

This research project will produce a validated assessment tool (RSI) designed specifically for the HIMR. By measuring the performance of HIMR adolescents and adults and reflecting student deficiencies, the RSI may be used to facilitate change in HIMR curriculums and to formulate individual treatment plans.

APPLICATION NUMBER: 498AH60062 GRANT NUMBER: G007604835

PROJECT TITLE: Development of a System for Identification and Assessment of Special Needs Learners

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Rupert N. Evans and Robert M. Tomlinson
University of Illinois at Urbana-Champaign
Bureau of Educational Research
354 Administration Building
Urbana, Illinois 61801 (217) 333-9382

FUNDING PERIOD: August 15, 1976 - February 14, 1978*

OBJECTIVES

The purpose of this project is to develop practical procedures, guidelines, and materials to assist Local Education Agencies (LEAs) personnel in improving methods of identification and educational assessment of students with special needs. Specific objectives are to:

1) Generate functional criteria for identification of special needs learners in occupational education programs.
2) Formalize a conceptual model for identification and assessment of mainstreamed special needs learners.
3) Develop and field test a system for identification, assessment, instructional prescription, and evaluation of special needs learners to be used by occupational education, instructional and administrative personnel.
4) Formulate a plan for dissemination of identification criteria, resource guides, and supporting materials.

PROCEDURES

1) Identify and review criteria currently used.
2) Formalize and improve the identification and assessment model.
3) Develop handbooks for use by administrative and instructional personnel.
4) Field test and revise model and handbooks.
5) Plan dissemination.

EXPECTED CONTRIBUTION TO EDUCATION

1) Evaluate the processes of identification and assessment in existing vocational programs which mainstream special needs students.
2) Reduce the difficulty of identifying and assessing the progress of special needs learners in mainstreamed and integrated vocational programs.

*Funding received during the transition quarter.

APPLICATION NUMBER: 498AH60017 GRANT NUMBER: G007604048

PROJECT TITLE: A Research and Development Project to Analyze Existing Barriers, Forecast Potential Problem Areas, and Prescribe Professional Development Solutions to Mainstreaming Handicapped Students into Vocational Education Programs

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Dennis C. Nystrom and L. Dean McClellan
Department of Occupational and Career Education
School of Education
University of Louisville
Louisville, Kentucky 40208 (502) 636-6225

FUNDING PERIOD: July 1, 1976 - December 31, 1977

OBJECTIVES

1) Analyze specific vocational education needs of handicapped students with regard to integrating these individuals into regular vocational education programs.
2) Analyze existing barriers to vocational education mainstreaming of handicapped students and forecast potential problems and barriers.
3) Convert categories identified in (2) into professional development competency statements and instructional modules for special vocational education administrators, guidance personnel, and teachers.
4) Synthesize assessment and forecasting procedures, instructional module development techniques, and research design into a transportable model.
5) Incorporate project products into the ongoing professional development activities in vocational and special education at the University of Louisville.

PROCEDURES

1) Determine the status of existing Region IV handicapped and mainstreaming programs in vocational and special education.
2) Forecast problem areas in mainstreaming handicapped students into regular vocational programs by Delphi technique and computer analysis.
3) Develop a transportable model for use by Kentucky and other states interested in implementing mainstreaming procedures.

EXPECTED CONTRIBUTION TO EDUCATION

This project will provide important information for program planners relative to the many possible questions that will arise, and provide several suggested solutions to problems. It will result in instructional materials for professional vocational educators who may not be prepared for mainstreaming problems, and will provide a transportable model for use by Kentucky and other states.

APPLICATION NUMBER: 498AH60328 GRANT NUMBER: G007604052

PROJECT TITLE: Bilingual Bicultural Instructional Resources for Vocational Education/Training in Human Services

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Michael F. Beaudonin, Director
Bilingual Human Service Programs
Bangor Community College
Bangor, Maine 04401 (207) 947-0820

FUNDING PERIOD: July 1, 1976 - June 30, 1977

OBJECTIVES

To improve educational and employment opportunities for Maine's adult French-American population, the project will research and develop bilingual, bicultural instructional resources for human service vocations in the following ways:

1) Design bilingual, bicultural instructional aids for use in adult education/training programs in human services.
2) Organize and implement a statewide system for the dissemination of these bilingual materials and resource people.
3) Serve as a model for the replication of bilingual procedures and materials in other geographic areas and within other vocational education programs.

PROCEDURES

1) Orient educational institutions and human service agencies to the project and its objectives, determine educational/training needs, and solicit their interest and participation in utilizing project resources.
2) Develop a core of seven to 10 bilingual instructional modules in human service skill areas (eg. group counseling, crisis intervention) for use in existing and new educational programs.
3) Utilize individuals with expertise in bilingual and/or human service education to design and field test bilingual, bicultural instructional aids.
4) Package project resources for replication and dissemination.

EXPECTED CONTRIBUTION TO EDUCATION

1) A resource development and dissemination system for bilingual vocational education materials and expertise will be readily available statewide.
2) Human Service agencies and their clients will benefit from job applicants and employees with increased bilingual bicultural skills.

APPLICATION NUMBER: 498AH60228 GRANT NUMBER: G007604318

PROJECT TITLE: Bilingual Metric Education Modules for Postsecondary and Adult Vocational Education

PRINCIPAL INVESTIGATOR AND ORGANIZATION:

Mary L. Ellis, President and
Denise A. Pierce, Director of Operations
Ellis Associates, Inc.
P. O. Box 466
College Park, Maryland 20740 (301) 864-7600

FUNDING PERIOD: July 1, 1976 - October 31, 1977

OBJECTIVES

The primary objective is to ensure that vocational education students with limited English-speaking ability are equipped with the same baseline understanding of metric measurement applications in employment and in consumer and domestic activity as their English-speaking peers. The secondary objective is language development and reinforcement.

PROCEDURES

The following procedures will be utilized: 1) review existing metric education materials; 2) develop basic metric concepts; 3) select occupational clusters and perform occupational analyses; 4) develop consumer application components; 5) prepare materials in bilingual (English/Spanish) format; 6) field test modules in two sites utilizing postsecondary and adult classes; 7) revise modules as appropriate, based on teacher and student evaluations; 8) print final modules in looseleaf format; and 9) distribute modules to agencies and individuals best equipped to disseminate information on the modules.

EXPECTED CONTRIBUTION TO EDUCATION

Two sets of modules (one for Business and Office Education, one for Trade and Industrial Education) will be developed which include both consumer and occupational applications representative of those found in various jobs. The metric core (first five modules) will be applicable to all vocational education areas at the postsecondary and adult level. The metric core can be used as a minicourse or integrated into existing vocational education classes. With the exception of inexpensive metric measurement tools, the modules contain all materials needed for preparation and presentation. In addition to bilingual classes, these modules may be used in English-speaking or Spanish-speaking classes.

APPLICATION NUMBER: 498AH60224 GRANT NUMBER: G007604353

PROJECT TITLE: Development of a Plan to Provide Vocational Education Services to Youth under the Custody of the Massachusetts Department of Youth Services

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Ronald L. Nuttall, Director
Laboratory for Statistical and Policy Research
Boston College, McGuinn 508
Chestnut Hill, Massachusetts 02167 (617) 969-0100

FUNDING PERIOD: July 1, 1976 - March 30, 1977

OBJECTIVES

The project will assess vocational education services currently available to youth under the custody of the Massachusetts Department of Youth Services, and will develop a plan for providing such services via pilot vocational programs. Specific objectives are to: 1) describe current vocational education services available for DYS youth and their relationship with academic components of the DYS educational system; 2) describe characteristics of youths under DYS custody; 3) assess the need for vocational education programs for DYS youth; 4) assess feasibility and acceptability of various alternatives for providing vocational education services to DYS youth; 5) assess existing and potential funding sources for vocational education; 6) develop specific program proposals for pilot vocational education programs; and 7) make recommendations concerning the continued development of vocational education for DYS clients.

PROCEDURES

Phase I will involve collection and analysis of data and will be accomplished by means of 1) analysis of relevant documents; 2) in-depth interviews; and 3) a mailed questionnaire. Phase II will involve the development of recommendations and proposals for pilot vocational education programs for DYS clients and will be achieved through 1) the use of data obtained in Phase I; 2) review of relevant literature; 3) study of exemplary programs; 4) analysis of Phase I results by an advisory committee; and 5) projections of the need for workers in various occupations.

EXPECTED CONTRIBUTION TO EDUCATION

End products will be 1) a report of current provisions for vocational education for DYS clients and the perceived need for expanded services; 2) two proposals for pilot vocational education projects for DYS clients; and 3) recommendations for continued upgrading of DYS vocational education services. The DYS serves approximately 2,500 juvenile offenders from ages 7 to 21 who need more extensive rehabilitation than probation affords. Massachusetts has recently deinstitutionalized its juvenile corrections system. If other states are to follow, mechanisms must be developed for adequate vocational guidance and training.

APPLICATION NUMBER: 498AH60118 GRANT NUMBER: G007604315

PROJECT TITLE: Development and Testing of Criteria for the Identification and Selection of Mentally Handicapped Students for Vocational Programs

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
James F. Shill, Director
Research and Curriculum Unit
Mississippi State University
Drawer DX
Mississippi State, Mississippi 39762 (601) 325-2510

FUNDING PERIOD: July 1, 1976 - December 31, 1977

OBJECTIVES

The project will develop identification and selection criteria for use in enrolling students in special vocational programs or allowing students to be mainstreamed into regular vocational programs. Specific objectives are to: 1) utilize a steering committee for planning, review, and evaluation; 2) catalog, review, and analyze components of relevant systems and studies; 3) design tests involving vocational skills prediction for use with the mentally handicapped and the slow learner; 4) determine success norms obtained by mentally handicapped students in specific vocational programs; 5) determine the feasibility of special vocational programs for mentally handicapped; 6) develop an identification and selection criteria for mentally handicapped students entering special state-sponsored vocational programs; and 7) develop reports for regional and national dissemination.

PROCEDURES

The procedure includes the analysis and cataloging of materials and/or systems currently used in the identification and selection of EMRs. Staff, consultants, and steering committee members will design vocational prediction tests for use with EMRs in rural school systems where expensive testing systems are not obtainable. Tests will be field tested, revised, and retested. Students in current programs will be tested to determine norms to utilize in identification and selection of EMRs for vocational programs. Surveys of instructors in both handicapped programs and in regular vocational programs will be conducted to determine the feasibility of mainstreaming handicapped students. Program personnel, consultants, committee members, and State Department of Education personnel will utilize project results for developing the official criteria for identifying and selecting the mentally handicapped for vocational programs in Mississippi.

EXPECTED CONTRIBUTION TO EDUCATION

Inexpensive tests to determine vocational skill prediction for mentally handicapped students will be developed along with identification and selection criteria for selecting mentally handicapped students.

APPLICATION NUMBER: 498AH60074 GRANT NUMBER: G007604703

PROJECT TITLE: A Project to Design and Develop a Comprehensive Master Plan for Vocational Education in the Correctional Institutions of Missouri

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
James A. Pershing, Assistant Professor
College of Education
University of Missouri--Columbia
306 Columbia Professional Building
Columbia, Missouri 65201 (314) 882-3278

FUNDING PERIOD: September 1, 1976 - February 28, 1978*

OBJECTIVES

The mission statement for the study is to formulate a master plan for developing and implementing a comprehensive vocational education delivery system for persons in correctional settings in the State of Missouri. The following five goal statements have been established: 1) assess the need for vocational education of persons in correctional settings; 2) evaluate the existing vocational education delivery system; 3) ascertain viable alternatives for delivering vocational education for persons in correctional settings; 4) develop a master plan for providing a comprehensive vocational education delivery system for persons in correctional settings; and 5) develop a model plan for implementing an innovative and comprehensive vocational education delivery system at the new medium-security facility being constructed in Missouri.

PROCEDURES

In Phase I of the project, the vocational needs of the inmate population will be ascertained, the effectiveness of the current delivery system will be evaluated, and the applicability of alternative delivery systems will be explored. In Phase II, the project's master planning committee will develop a philosophy, goals, and objectives for the Division of Correction's vocational education delivery system. Phase III of the project will involve developing a master plan for implementing the proposed vocational education delivery system. An organizational model and management plan will be developed to assist in implementing the plan.

EXPECTED CONTRIBUTION TO EDUCATION

This master plan will have an impact on the entire prison population. Currently there are approximately 4,500 inmates located in seven institutions throughout the State. Forty-three percent of the inmates are nonwhite. Most come from disadvantaged backgrounds. The average inmate is 25 years of age with a median grade achievement of 7.6 years. Furthermore, the master plan will serve as a model that will benefit agencies in states other than Missouri that are interested in developing comprehensive vocational education delivery systems in correctional settings.

*Funding received during the transition quarter.

APPLICATION NUMBER: 498AH60180 **GRANT NUMBER:** G007604316

PROJECT TITLE: Vocational and Bilingual Education Curriculum Development: A Cooperative Effort

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Ronald D. Todd
Department of Technology & Industrial Education
New York University
New York, New York 10003 (212) 598-3357

FUNDING PERIOD: September 1, 1976 - February 28, 1978

OBJECTIVES

1) Develop vocational curriculum materials for use with students of limited English speaking ability (specifically Hispanic and Haitian) by modifying existing curriculum materials.
2) Document the process used in developing bilingual vocational curriculum in order to generate a model and procedures for use in subsequent modificational/development efforts.
3) Design, produce, and disseminate a Modular Procedural Guide that provides specific steps, possible formats, examples, criteria, and decisionmaking processes for use by bilingual and vocational curriculum specialists in generating needed bilingual vocational curriculum materials.

PROCEDURES

The procedures for materials modification include: 1) establishing a resource/talent pool of potential participants in the areas of bilingual, vocational, and curriculum development; 2) conducting a needs assessment to determine program and student needs; 3) developing program and student objectives; 4) identifying available curriculum materials; 5) applying product assessment criteria; 6) matching selected materials and objectives; 7) modifying existing materials; 8) field testing materials; and 9) revising materials and procedures.

EXPECTED CONTRIBUTION TO EDUCATION

The procedures that will be developed are significant because of their transferability to new areas. These procedures will help to clarify, for new and experienced practitioners, what is to be accomplished, what information is needed to make the required decisions, who is involved in that decisionmaking, and what is to be the output form of those decisions.

APPLICATION NUMBER: 498AH60088 CONTRACT NUMBER: 300760374

PROJECT TITLE: Vocational Education and Corrections: An Assessment of Opportunities and Needs

PRINCIPAL INVESTIGATOR AND ORGANIZATION:

Donald W. Drewes, President
CONSERVA, Inc.
1000 Chamberlain Street
Raleigh, North Carolina 27607 (919) 832-5057

FUNDING PERIOD: July 1, 1976 - June 30, 1977

OBJECTIVES

1) Design a procedure and accompanying instruments for assessing correctional vocational education needs.
2) Field test the procedure in the North Carolina Department of Correction.
3) Make recommendations regarding improvements in vocational education programming in the North Carolina Department of Correction.

PROCEDURES

1) Assessment of the current and anticipated employment opportunities for ex-offenders; formal vocational education programs, services, and activities presently available to inmates; experience opportunities presently available to inmates; legal and administrative barriers to employment of ex-offenders; and perceived vocational education and employment needs of inmates.
2) Analysis of the congruency between assessed inmate educational and employment needs and available educational and employment opportunities.
3) Development of recommendations for improving the congruency between needs for skill development and the opportunity to fulfill these needs.

EXPECTED CONTRIBUTION TO EDUCATION

The end product will be a generalizable needs assessment methodology. The results and recommendations will provide the catalyst and direction for the future development of a vocational diagnostic development program tailored to the unique occupational needs of each offender.

APPLICATION NUMBER: 498AH60193 CONTRACT NUMBER: 300760375

PROJECT TITLE: Mainstreaming the Handicapped in Preparatory Occupational Education Programs in North Carolina

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
James H. Hughes, Senior Research Analyst
System Sciences, Inc.
P. O. Box 2345
Chapel Hill, North Carolina 27514 (919) 929-7116

FUNDING PERIOD: July 1, 1976 - December 31, 1977

OBJECTIVES

The objectives of this study are to 1) identify needs and barriers to mainstreaming as expressed by occupational educational personnel who occupy key roles with respect to its implementation; 2) investigate relationships between attitudes, identified needs, and barriers to mainstreaming, and occupational program area, size and location of schools; and 3) make recommendations as to ways to overcome barriers to mainstreaming identified in this study.

PROCEDURES

Phase I utilized the Delphi technique to assess needs and identify barriers of local occupational education program administrators. The final output of this procedure will provide the content base for the "Questionnaire on Mainstreaming" for use with principals and teachers. Attitude inventories to be used in the survey of principals and teachers include the *Kerlinger 7 Educational Scale* and the *Minnesota Teacher Attitude Inventory (MTAI)*. Phase II includes a survey of attitudes of principals of high schools in which occupational education programs are offered. Phase II will be an assessment of teacher attitudes toward mainstreaming of the handicapped in occupational education. Analysis of variance procedures will be applied to the attitude scores and individual and/or composite items from the questionnaire on mainstreaming. Additional analyses will be performed on the attitude scores of the *MTAI* and the "Questionnaire on Mainstreaming" responses in examining their utility in local school level needs assessment activities.

EXPECTED CONTRIBUTION TO EDUCATION

The information derived should be beneficial to North Carolina occupational education programs, especially in planning and conducting preservice and inservice teacher education programs stressing mainstreaming in occupational education. A one-day dissemination conference is planned for approximately 20 state occupational education personnel and five representatives from the State Division of Exceptional Children, who will have major leadership responsibilities in implementing mainstreaming.

APPLICATION NUMBER: 498AH60194 CONTRACT NUMBER: 300760376

PROJECT TITLE: Vocational Education in Correctional Institutions: State-of-the-Art Assessment of Programs in Region IV

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Eric Rice
System Sciences, Inc
P.O. Box 2345
Chapel Hill, North Carolina 27514 (919) 929-7116

FUNDING PERIOD: July 1, 1976 - September 30, 1977

OBJECTIVES

1) Produce a major data/knowledge base of information about vocational education in correctional institutions.
2) Define, describe, and quantify the characterisitcs of vocational education provided in all Region IV public correctional institutions, both adult and juvenile.
3) Sharply delineate those issues which require resolution in order to more adequately serve the target population.
4) Describe and characterize typical organizational arrangements for vocational education programs in Southeastern correctional institutions.
5) Illustrate innovative procedures/techniques/practices found in the target institutions that have potential for transportability.
6) Generate recommendations which address the question of how vocational education in correctional institutions can be made more effective.

PROCEDURES

A survey of all public correctional institutions, adult and juvenile, is being conducted using a combination mail questionnaire, phone followup, and site visit information-gathering procedure. Data accessed in the survey includes information about the types of programs offered, the populations served, the agencies involved, the relative success of these efforts, and the overall training needs for vocational education in Southeastern correctional institutions.

EXPECTED CONTRIBUTION TO EDUCATION

The results of this investigation will constitute the beginnings of a data base on vocational education in correctional institutions. Such data will serve as the information base for the generation of recommendations relative to policy and program development/innovation as well as permit a more in-depth analysis/evaluation of the current situation. Further, this information will be disseminated through the proposed information seminar and popular monograph, each prepared at the conclusion of the activity. Such a state-of-the art assessment is a critical first step in a long range program to meet the needs of this target population.

APPLICATION NUMBER: 498AH60217 GRANT NUMBER: G007604317

PROJECT TITLE: A study of Vocational Education in Ohio Correctional Institutions

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Robert E. Abram, Specialist
The Center for Vocational Education
The Ohio State University
1960 Kenny Road
Columbus, Ohio 43210 (614) 486-3655

FUNDING PERIOD: July 1, 1976 - December 31, 1977

OBJECTIVES

Vocational education programs have been established for incarcerated adults and youth on the assumption that they help inmates obtain employment upon release or motivate them toward further education to obtain vocational skills. However, this assumption has never been tested in Ohio. A followup and planning study will be conducted to:

1) Obtain evaluative data on program operations in six Ohio institutions.
2) Compare institutional programs with existing standards for vocational education.
3) Determine the use of vocational training by former students who have returned to the community.
4) Develop recommendations that will impact improved education for students.

PROCEDURES

An assessment of current programming will be conducted at two adult and four youth institutions. Data will be collected by means of interviews with key program personnel and systematic observations of facilities and equipment. Mail and telephone followup of a sample of program participants will focus on post-release employment and/or educational experiences. Findings will be synthesized and recommendations developed for program improvement.

EXPECTED CONTRIBUTION TO EDUCATION

The end products will consist of three reports:

1) A program assessment report presenting comparisons between current program quality and desired program standards or guidelines. Discrepancies and probable causes will be noted and described.
2) A report of the followup of program impact on released participants.
3) Final report synthesizing results of program assessment and followup, and developing feasible recommendations for improvement of vocational education in Ohio's correctional institutions.

APPLICATION NUMBER: 498AH60220 GRANT NUMBER: G007604417

PROJECT TITLE: A National Study of Vocational Education in Corrections

PRINCIPAL INVESTIGATOR AND ORGANIZATION:

Charles Whitson, Specialist
The Center for Vocational Education
The Ohio State University
1960 Kenny Road
Columbus, Ohio 43210 (614) 486-3655

FUNDING PERIOD: July 1, 1976 - December 31, 1977

OBJECTIVES

No study of vocational education in corrections has been made that addresses the key questions of needs, problems, and issues relative to fair, professional standards. This study will be conducted to: 1) describe the state-of-the-art as reflected in contemporary literature and documents; 2) identify and synthesize a set of standards by which vocational education programs, operations, and outcomes may be evaluated; 3) survey nationally all vocational education programs in corrections; 4) study in-depth selected programs with particular emphasis on how well the programs meet the developed standards; and 5) prepare a list of recommendations that are in concert with the identified needs, problems, and issues.

PROCEDURES

A review and synthesis of the literature will be performed by researching various computerized document bases, identifying pertinent sources, and obtaining documents. From this research will come tentative standards for vocational education which will be adapted by a panel of expert consultants working through a modified Delphi technique to arrive at usable standards within correctional programs. Questionnaires will be mailed to all correctional systems in the nation requesting information on vocational programs. Site visitations will be made to a sample of correctional institutions to validate survey results and assess the applicability of the developed standards. The project will be assisted by an advisory committee established for final review of the standards and project outcomes.

EXPECTED CONTRIBUTION TO EDUCATION

The five specific products of this project will provide a considerable base of information for future planning and development of vocational education in corrections. The final products are: 1) review and synthesis of the literature of vocational education in corrections; 2) survey of vocational education in corrections; 3) standards for vocational education in corrections; 4) report of site visits comparing programs to standards, and 5) final report containing recommendations for future directions of vocational education for offenders.

APPLICATION NUMBER: 498AH60152

GRANT NUMBER: G007604049

PROJECT TITLE: Correctional Vocational Education Research

PRINCIPAL INVESTIGATOR AND ORGANIZATION:

Michael Martin, Correctional Coordinator
Chemeketa Community College
4000 Lancaster Dr.
P. O. Box 1007
Salem, Oregon 97308 / (503) 399-5135

FUNDING PERIOD: July 1, 1976 - June 30, 1977

OBJECTIVES

This research/demonstration project is aimed at specific needs of the inmates at Oregon State Penitentiary and Oregon State Correctional Institution. The research design is intended to evaluate existing vocational education programs offered within correctional settings. The project design includes career guidance and counseling, skill training, extension of training into the community, and a quasi-experimental research design.

PROCEDURES

1) Develop attainable career goals for each student.
2) Motivate and assist students to attain their highest level of academic, vocational, social, and economic development.
3) Articulate institutional vocational education programs with community college technical programs to improve skill training.
4) Provide educational services (counseling, plan development) to residents on work-training release and parole.
5) Apply a quasi-experimental research design and report research results to community colleges and correctional facilities.

EXPECTED CONTRIBUTION TO EDUCATION

The major outcome will be a vocational education program which clearly demonstrates capability of community-based training facilities (in this case, a community college) to provide online training in a correctional setting. Differing effects of degree-oriented/nondegree-oriented instruction on inmate attitudes and career choices will be measured. Results will be delivered to state and local agencies and the U.S. Office of Education.

APPLICATION NUMBER: 498AH60040 GRANT NUMBER: G007604312

PROJECT TITLE: A Home-Language Free Adult Pre-Vocational and Audio-Visual Course in English-as-a-Second Language

PRINCIPAL INVESTIGATOR AND ORGANIZATION:

Philip D. Smith, Jr.
Center for Language Research and Services
Educational Development Center
West Chester State College
110 West Rosedale Avenue
West Chester, Pennsylvania 19380 (215) 436-2636

FUNDING PERIOD: July 1, 1976 - June 30, 1977

OBJECTIVES

1) Develop a production-ready basic prevocational course in English-as-a second language using an audiovisual approach which can be utilized with persons from any home-language.
2) Test and revise these materials.
3) Develop self-instructional instructor training materials which will permit teaching success by monolingual English-speaking lay teachers.

PROCEDURES

1) The Project Staff will develop a complete set of competencies for basic prevocational oral and written English.
2) The staff will write and illustrate the course which will be field tested on non-English-speaking adults and revised prior to finalization.

EXPECTED CONTRIBUTION TO EDUCATION

The Project will provide up-to-date basic prevocational English materials which can be used both in regular adult programs or by volunteers in nontraditional settings such as churches, community centers, and vocational locations.

APPLICATION NUMBER: 498AH60049 GRANT NUMBER: G007604310

PROJECT TITLE: Labor Market Effects of Occupational Education Programs for the Physically Handicapped

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Jacob J. Kaufman
Institute for Research on Human Resources
The Pennsylvania State University
207 Old Main
University Park, Pennsylvania 16802 (814) 865-9561

FUNDING PERIOD: July 1, 1976 - December 31, 1977

OBJECTIVES

This project is concerned with the education, training, and eventual placement of physically handicapped students in the secondary schools. It will examine the occupational programs for this group of students in those schools in order to develop information on the measures of 1) the availability and utilization of secondary school occupational programs and 2) the costs of alternative programs and their effectiveness in terms of the labor market experiences of the program graduates.

PROCEDURES

The survey of programs will be limited to schools in Pennsylvania. Costs will be determined by examination of school records; short-term effectiveness by sample survey, including the utilization of the data bank of Pennsylvania to the extent the data are available, reliable, and valid. A comparison will be made of the cost-effectiveness of programs specially designated for handicapped students with cost-effectiveness of regular occupational programs attended by handicapped persons, and with a control group of 500 nonhandicapped students. The long-range labor market experiences will be national in scope by utilizing data available from PROJECT TALENT.

EXPECTED CONTRIBUTION TO EDUCATION

The results of this study should be helpful in assisting vocational schools to improve or develop programs for the physically handicapped.

APPLICATION NUMBER: 498AH60052 GRANT NUMBER: G007604311

PROJECT TITLE: The Quality and Results of Vocational Education in Correctional Institutions

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Jacob J. Kaufman
The Pennsylvania State University
Institute for Research on Human Resources
207 Old Main
University Park, Pennsylvania 16802 (814) 865-9561

FUNDING PERIOD: July 1, 1976 - December 31, 1977

OBJECTIVES

In contrast with the usual studies of this type which compare an experimental group which has had vocational training in a correctional institution with a control group which has not had such training, this project will evaluate 1) the quality of the vocational program, 2) the level of skill attainment that the individuals attain when they leave the program, and 3) the educational climate of the institution. In addition, the study will measure the success of the program after the "students" leave the correctional institution, relating success to the broad educational climate of the institution.

PROCEDURES

The cooperation of five to 10 correctional institutions will be obtained, particularly those which offer extensive vocational education or training. The quality of the program and the educational climate will be assessed by onsite visits and proficiency testing of the "students" when they have completed the programs. Personal interviews will take place for 200 former residents approximately six months following their release.

EXPECTED CONTRIBUTION TO EDUCATION

Recognizing that many residents of correctional institutions come from dysfunctional home environments and/or dysfunctional school environments, and recognizing the fact that correctional institutions do provide vocational education, it is essential to know the extent to which, if at all, the educational climate of correctional institutions continues to be dysfunctional. This project will contribute to a better utilization of educational resources in the correctional setting by determining the key variables which could lead to success.

APPLICATION NUMBER: 498AH60124 GRANT NUMBER: G007604053

PROJECT TITLE: A Study of the Acquisition of Vocational Concepts by Bilingual Students in Vocational Education Programs

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Donald L. Clark, Associate Dean for Research
Texas A & M University
College of Education
College Station, Texas 77843 (713) 845-5311

FUNDING PERIOD: July 1, 1976 - December 31, 1977

OBJECTIVES

The principal goal of this research effort is to determine the effect of Spanish-English bilingualism on the acquisition, retention, and transfer of vocational concepts for Spanish-speaking students, including those with special learning needs who are enrolled in vocational education programs. Specific objectives for the study are to: 1) determine if there are significant differences in levels of concept acquisition and retention across various student classifications as a function of being given oral instruction in either Spanish or English; 2) determine the extent to which such student characteristics as occupational aptitude, IQ, reading level, socio-economic status, and previous learning serve as predictors of the rate and extent of acquisition and retention of vocational concepts by bilingual students; and 3) determine the influence on concept acquisition, retention, and transfer of variable speech rates, redundant information, labels, group size, and various presentation formats.

PROCEDURES

Variables influencing the attainment of vocational concepts by bilingual students will be examined under carefully controlled experimental conditions. These include characteristics of the learner, variables within the instructional situation, the mode of concept presentation, the complexity of the concept learning task, and the responses and feedback that occur. Correlation studies will be made between selected student variables and concept attainment, retention, and transfer. Differences in concept learning as a function of Spanish-English language predominance will be assessed through a series of related experiments which utilize randomized control-group pretest-posttest experimental designs. Data will be compiled, statistically analyzed, and prepared for dissemination to vocational teachers.

EXPECTED CONTRIBUTION TO EDUCATION

Results of the research should benefit bilingual vocational students as well as teachers, employers, publishing firms, teacher trainers, program supervisors, and consultants by providing them with an efficient model for teaching concepts and for developing materials with respect to the influence of bilingualism. The study will also provide program planners and curriculum developers with useful data for making comparisons between regular, disadvantaged, and handicapped bilingual students.

APPLICATION NUMBER: 498AH60107 GRANT NUMBER: G007604314

PROJECT TITLE: Developing Program Models and Prototype Training Materials to Meet Occupational Training Needs of Adult Women Offenders from a Correctional Institution

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Era F. Looney
Division of Vocational and Technical Education
Virginia Polytechnic Institute and State University
Blacksburg, Virginia 24061 (703) 951-5378

FUNDING PERIOD: July 1, 1976 - December 31, 1977

OBJECTIVES

The primary objective of this project is to develop model curricula for vocational training programs, along with prototype instructional materials, for use in developing and upgrading occupational skills in adult women offenders from a correctional institution.

PROCEDURES

1) Determine the nonstereotyped occupational skill training needs and interests of women offenders in Virginia by administration of a written questionnaire followed by brief personal interviews with selected offenders for validation purposes.
2) Develop model vocational training curricula for the areas of training indicated as most needed.
3) Develop prototype vocational training materials in approximately five key areas of curriculum where no appropriate resources exist.
4) Field test, evaluate, and revise the instructional materials. Field testing with selected offenders will ensure that the materials are suitable for their intended use. Based upon field testing and a third party evaluation, each package and model curriculum plan will be revised, professionally reproduced, and made available to the general public on a cost-recovery basis.

EXPECTED CONTRIBUTION TO EDUCATION

The results of this project will provide the staff at Virginia Correctional Center for Women with the basic data and materials needed for a future vocational training implementation stage. Since each vocational curriculum model and instructional package will focus on specific high-priority needs of adult women offenders in Virginia, many of the same occupational training needs should be relevant to women offenders across the nation.

APPLICATION NUMBER: 498AH60234 GRANT NUMBER: G007604704

PROJECT TITLE: The Development, Assessment and Dissemination of an Administrative Policy Manual for the Vocational Education of the Handicapped

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Alan Abeson, Associate Director
State and Local Governmental Relations
The Council for Exceptional Children
1920 Association Drive
Reston, Virginia 22091 (703) 620-3660

FUNDING PERIOD: September 1, 1976 - February 28, 1978*

OBJECTIVES

The purpose of this national policy research project is to develop, assess, and disseminate a local education agency(ies)-focused administrative policy manual regarding the provision of appropriate vocational education services to all handicapped children.

PROCEDURES

1) Develop a decision point check list (DPCL) which is a skeleton of vocational education programming for handicapped children that will contain the decisions which need to be made by administrators and policymakers in order to operate a program.
2) Develop a draft manual based on the DPCL and a subsequent questionnaire for assessing policy effectiveness in approximately 15 previously identified varied successful vocational education programs for handicapped children.
3) Conduct regional conferences for experts and policymakers in vocational education to assess the second draft of the policy manual.
4) Implement the previously developed dissemination plan for distribution of the third and final draft of the policy manual.

EXPECTED CONTRIBUTION TO EDUCATION

As a result of this project, local education agency administrators and policymakers will have available to them a single manual that will assist them in creating or improving administrative policy that serves as the basis for delivering vocational education services to handicapped children.

*Funding received during the transition quarter.

APPLICATION NUMBER: 498AH60184 GRANT NUMBER: G007604416

PROJECT TITLE: Program Evaluation and Planning: Evaluating Current Vocational Programs and Identifying Handicapped Students and Their Vocational Needs for 1977-1982

PRINCIPAL INVESTIGATOR AND ORGANIZATION:

Lloyd W. Tindall, Program Associate
Wisconsin Vocational Studies Center
Box 49, 321 Old Education Building
University of Wisconsin
Madison, Wisconsin 53706 (608) 263-3415

FUNDING PERIOD: July 1, 1976 - December 31, 1977

OBJECTIVES

The purpose of the project is to formulate goals and procedures for analyzing, revising, and developing vocational education programs for the handicapped in Wisconsin's 16 VTAE districts during 1977-1982. The objectives are to 1) evaluate selected VTAE projects funded under the 1968 Vocational Amendments to find successful techniques; 2) develop criteria and procedures for the identification of the handicapped students who will be eligible for VTAE training in the 1977-1982 time period; 3) develop a report containing an analysis of barriers in the Wisconsin VTAE schools which prevent the handicapped from enrolling in or completing vocational training programs; 4) identify and develop a composite profile of the vocational education needs of persons tested under Wisconsin Statutes 115.81 who will be eligible for VTAE training in the 1977-1982 time period; and 5) utilize the results of Objectives 1-4 to formulate recommendations designed to initiate program revision and development in each Wisconsin VTAE district.

PROCEDURES

The project staff will develop instruments to determine: 1) the number of handicapped students in each of Wisconsin's 16 VTAE districts, age 14-20, by exceptionality; 2) cognitive, physical, and emotional characteristics of the handicapped, age 14-20; and 3) successful techniques used in 50 VTAE programs and barriers to enrollment in, and completion of, VTAE courses. A workshop of secondary and postsecondary teachers and administrators will use the above data to determine the vocational needs in each of the VTAE districts. Sources of information include Department of Public Instruction data banks and information on program planning in each of Wisconsin's 16 VTAE districts. Project staff will make final recommendations.

EXPECTED CONTRIBUTION TO EDUCATION

The Wisconsin educational system will benefit by the provision of a 5-year summary of students eligible for VTAE training in 1977-1982. Data on handicapped students by exceptionality will aid Wisconsin educational agencies in long-range planning, budgeting, and organizing vocational services to the handicapped.

PART C: RESEARCH

Special Projects

APPLICATION NUMBER: 498AH60355 CONTRACT NUMBER: OEC-0-72-0414

PROJECT TITLE: Project Baseline: A National Study of Vocational Education

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Arthur M. Lee, Director of Project Baseline
Northern Arizona University
P. O. Box 15015
Flagstaff, Arizona 86011 (602) 523-3439

FUNDING PERIOD: April 1, 1976 - March 31, 1977

OBJECTIVES

1) Present for the fifth year a comprehensive report and analysis of Vocational Education in all 50 states, the District of Columbia, and Puerto Rico.
2) Extend the data base established over the past 4 years.
3) Identify and measure changes over an additional 1-year period and compare and measure Vocational Education from FY 1971 - FY 1975.
4) Interpret the data reported in light of current needs.
5) Make recommendations for the improvement and strengthening of vocational education.

PROCEDURES

Collection, tabulation, analysis, comparison, and interpretation of data available from the states will be continued. The results will be published in a fifth volume of Baseline's national report, *Learning A Living Across The Nation*. Data are gathered from each state, displayed in a series of annual and longitudinal tables, returned to the states for confirmation, correction, or updating, and published with narrative comments, conclusions, and recommendations.

EXPECTED CONTRIBUTION TO EDUCATION

Baseline reports are the major source of information for state planning, comparative analysis, and program management in a large number of states. They are the basis of many provisions in Congressional legislation affecting education. They are used as texts, required reading, and major reference materials in colleges and universities throughout the United States. They are used by business and industry for trend analysis in educational equipment marketing and by USOE, NIE, and NCES in developing programs, priorities, and legislative positions. Each annual volume enlarges the areas of national, state, and local contribution, and Volume 5 is expected to continue this trend.

APPLICATION NUMBER: 498AH60365 CONTRACT NUMBER: 300760393

PROJECT TITLE: A National Study of State and Outlying Area Statutes Influencing Vocational Education that Possibly Prevent Public Schools from Using Private Training Resources

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Joan C. Baratz, Staff Director
Education Policy Research Institute of the
Educational Testing Service
1527 New Hampshire Avenue, N.W.
Washington, D.C. 20036 (202) 234-3500

FUNDING PERIOD: July 1, 1976 - June 30, 1977

OBJECTIVES

1) Identify Federal and State statutes, administrative procedures, and attitudinal barriers that limit the use of private training resources.
2) Disseminate the results of the study for use in development of plans to remove such obstacles.
3) Seek out successful examples of flexible arrangements for use by states and local education agencies in increasing flexibility in vocational education delivery systems.

PROCEDURES

Procedures will include a literature search; the identification of exemplary programs; and a review of Federal and State statutes and administrative regulations regarding vocational education and licensing regulations regarding proprietary schools. Additionally, questionnaires will be developed, distributed, and analyzed to identify those legal, administrative and attitudinal barriers that limit the use of private training resources. Questionnaires will be distributed to the State directors of vocational education, State officials responsible for community colleges and adult education, members of the State advisory committee, selected local officials, and other selected individuals. After the data has been gathered and analyzed, a series of five regional conferences will be held to disseminate project findings to State and local officials.

EXPECTED CONTRIBUTION TO EDUCATION

Effective use of private schools can make an important contribution in meeting federal vocational education goals and objectives. This project will provide education policymakers at the State and Federal levels with the necessary information to allow development of legislation and programs that facilitate the use of proprietary schools in the provision of vocational training.

APPLICATION NUMBER: 498AH60367 CONTRACT NUMBER: 300760098

PROJECT TITLE: Dimensions of Women's Employment in Nontraditional Occupations

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Georgette Semick
Koba Associates, Inc.
2001 S Street, N.W., Suite 302
Washington, D.C. 20009 (202) 265-9111

FUNDING PERIOD: April 19, 1976 - November 18, 1976

OBJECTIVES

As part of its continuing effort to provide up-to-date information and resource materials to those persons involved or interested in the changing status of women in the world of work, Koba Associates, Inc., was contracted to prepare an annotated bibliography of literature about women in nontraditional occupations. The objectives to be met in the development of this document were to: 1) focus on the experiences of individual women (their successes and failures) as they attempt to enter male dominated occupations; 2) compile literature related to the broad issue of women in the labor force including sex stereotyping, discrimination, and employment projections; and 3) identify the literature on a wide range of potential occupations which are currently male dominated.

PROCEDURES

In order to identify and locate the relevant literature for inclusion in the bibliography, staff contacted numerous women's groups, publishers, education associations, state directors in vocational education, unions and libraries. Koba then collected (or located in libraries when necessary) copies of identified books, journal/magazine articles, pamphlets, brochures, government documents, dissertations,and other printed materials for review and annotation. Entries were prepared and categorized according to a predetermined format and classification system developed in consultation with potential users as well as the Office of Education Project Monitor. The final document will be indexed by author, title,and subject/occupation with a section providing resources for additional information.

EXPECTED CONTRIBUTION TO EDUCATION

Intended as a reference document, the bibliography is designed for use by vocational education directors at the state level, vocational education teachers and planning personnel, women's action and employment placement groups, employers, and unions. It is intended to promote an awareness of the progress that has been made with respect to the employment of women in nontraditional occupations, thereby helping to increase their numbers in nontraditional occupational training programs as well as the nontraditional labor market.

APPLICATION NUMBER: 498AH60373 CONTRACT NUMBER: 300760426

PROJECT TITLE: Training Materials on Eliminating Sex Role Stereotyping in Vocational Education

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Shirley McCune, Program Director
Resource Center on Sex Roles in Education
National Foundation for the Improvement of Education
1201 16th Street, NW
Washington, D.C. 20036 (202) 833-5426

FUNDING PERIOD: October 1, 1976 - September 30, 1977

OBJECTIVES

The purpose of the project is to develop, field test, produce, and disseminate materials which can assist in the elimination of sex-role stereotyping and sex discrimination in local vocational education programs and institutions. The materials would be designed to provide vocational education personnel with increased awareness of sex-role stereotyping and discrimination; increased capability to identify sex-role stereotyping and sex discrimination in their policies, practices and programs; and increased capability to design, deliver and evaluate quality, nonstereotyped vocational education programs.

PROCEDURES

1) Implementation of a needs assessment.
2) Development of a kit of eight products.
3) Field testing of the materials in four sites.
4) Preparation of camera-ready copy and the coordination of the printing of 1,000 prototype copies.
5) Identification of key vocational education personnel and organizations.
6) Dissemination of the materials to these groups for further reproduction and distribution.

EXPECTED CONTRIBUTION TO EDUCATION

The end products of the project will include a handbook for vocational education administrators; a resource booklet for vocational counselors; a resource booklet for vocational education teachers; a student vocational planning workbook and two nonstereotyped learning posters; an awareness brochure on nonstereotyped vocational education for parents; and a training manual on the use of the materials in training efforts. The distribution of these materials in prototype form for reproduction by key vocational education personnel and organizations will facilitate their dissemination throughout the field.

APPLICATION NUMBER: 498AH60374 CONTRACT NUMBER: 300740676

PROJECT TITLE: Institute for Minority Business Education

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Warren K. Van Hook, Executive Director
Institute for Minority Business Education
School of Business and Public Administration
Howard University
P. O. Box 748
Washington, D.C. 20059 (202) 636-7187

FUNDING PERIOD: September 1, 1976 - August 31, 1977*

OBJECTIVES

The purpose of this program is to design, develop, and implement delivery of training services which will improve the management skills of minority business owners, managers, and selected consulting organizations. Specific objectives are to:

1) Determine the feasibility and practical value of the unique Assessment Center Methods in training of minority managers.
2) Utilize the application of diagnostic techniques in the development of effective education and training programs.
3) Establish an exemplary training model for widespread replication to expand and improve the management skills of minority managers across the nation.

PROCEDURES

1) Identify training and development needs of diverse client populations.
2) Design specialized course offerings to meet the identified needs.
3) Conduct a series of workshops and diagnostic centers to improve necessary skills.
4) Publish various periodicals which will enhance the achievement of the stated objectives.

EXPECTED CONTRIBUTION TO EDUCATION

Approximately 350 persons will participate in the training. An *Assessment Center Methods Manual* will be produced for utilization by other training programs across the nation.

*Funding received during the transition quarter.

APPLICATION NUMBER: 498AH60375 CONTRACT NUMBER: 300760438

PROJECT TITLE: A Study of Exemplary Cooperation Between Institutions Providing Postsecondary Non-Baccalaureate Occupational Education

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
David S. Bushnell, Director
American Association of Community and Junior Colleges
One Dupont Circle, NW, Suite 410
Washington, D.C. 20036 (202) 293-7050

FUNDING PERIOD: September 15, 1976 - April 14, 1977*

OBJECTIVES

Community colleges and postsecondary area vocational schools serve the public interest best when they succeed in achieving close cooperation. Some public policies and procedures facilitate such cooperation; some impede cooperation. This project seeks to:

1) Identify policies and procedures that facilitate cooperation.
2) Formulate recommendations to change policies that impede cooperation.
3) Disseminate widely the findings and recommendations.
4) Establish a mechanism to continue cooperation between the American Association of Community and Junior Colleges (AACJC) and The American Vocational Association (AVA).

PROCEDURES

1) A national survey will be conducted to gather information on policies and procedures that impede or facilitate cooperation.
2) Five regional workshops, a national assembly, and publication will be used to disseminate findings and recommendations.
3) A national advisory committee for the project will evolve into a joint liaison committee at the end of the project to continue working relations between AACJC and AVA.

EXPECTED CONTRIBUTION TO EDUCATION

Millions of students in community college occupational education programs and in postsecondary area vocational schools will be better served and millions of public dollars will be better spent by the fostering of cooperative relations at the local level between community colleges and area vocational schools.

*Funding received during the transition quarter.

APPLICATION NUMBER: 498AH60379 CONTRACT NUMBER: 300750236

PROJECT TITLE: Business and Management Education Program for Minority Women

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Lourdes Miranda King
L. Miranda and Associates
35 Wisconsin Circle
Suite 416
Washington, D.C. 20015 (301) 656-8685

FUNDING PERIOD: July 1, 1975 - October 1, 1976

OBJECTIVES

This project continuation will prepare and print a final report. The project has these objectives: 1) to equip potential women business owners and managers with information and techniques in the fundamental management skills which are common to functioning competently in a business ownership, corporate management or personal life management situation; 2) to stimulate interest in business and management careers; and 3) to enable participants to examine their vocational and career potential.

PROCEDURES

This project assessed the needs of Hispanic women in the areas of business and management; conducted a survey of existing programs and materials; adapted existing resource materials; designed a training program; developed curriculum; selected instructional methods; planned, organized and coordinated field study (direct observation of existing businesses); developed trainer units, handouts, and supporting instructional materials; delivered 60 hours of training to a pilot group of 43 Hispanic women; and evaluated program content and delivery.

EXPECTED CONTRIBUTION TO EDUCATION

This project is significant for the vocational and career education of Hispanic women. It has been designed to be replicated throughout the United States. The pilot training demonstrated the effectiveness and success of the program, with a participant retention rate of 86 percent.

INTERAGENCY TRANSFER OF FUNDS

PROJECT TITLE: Public Vocational Education Information Assistance at the State Level

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Gail Tarleton
National Advisory Council on Vocational Education
425 13th Street, N.W., Suite #412
Washington, D.C. 20004 (202) 376-8873

FUNDING PERIOD: July 1, 1975 - June 30, 1976

OBJECTIVES

The purpose of this project is the development of awareness of various aspects of vocational education among the many publics through local television and radio scripts, local communication centers, and billboard displays. Originally begun in 1970, this project has been continued on a yearly contractual basis until the present time.

PROCEDURES

Films for television and radio public service announcements in cooperation with local people from selected cities and/or geographical areas will be produced based on local interests and demands. Production will be accomplished and expenses borne by local sponsors.

EXPECTED CONTRIBUTION TO EDUCATION

1) Sharpened articulation of vocational education goals.
2) Increased cooperation between education and industry.
3) Expanded public awareness of the vocational education option.
4) Further appreciation of the characteristics of quality programming.

INTERAGENCY TRANSFER OF FUNDS

PROJECT TITLE: Monitorship of Project Baseline

PRINCIPAL INVESTIGATOR AND ORGANIZATION:

Ruth Tangman
National Advisory Council on Vocational Education
425 13th Street, NW, Suite 412
Washington, D.C. 20004 (202) 376-8873

FUNDING PERIOD: July 1, 1975 - June 30, 1976

OBJECTIVES

Project Baseline was begun in FY 1972 under the directorship of Arthur M. Lee who contracted with the Office of Education to conduct the study. Its objectives are to: 1) establish and explore a data base for vocational education; 2) identify and measure changes over the four years of Project Baseline's operation; and 3) explore the use of computer technology in processing vocational education data on a national basis. The objectives of the monitorship of the project by the National Advisory Council on Vocational Education are to advise and consult with the project director in implementation of Project Baseline, to see that it is fulfilling its contracted objectives, and that it is meeting its schedule.

PROCEDURES

Project Baseline will submit reports, budget, and monthly schedules to the Council for approval. Any requests for change in procedure, budget, or scheduling will be reviewed by the Council. Project Baseline will collect data from 1) state divisions of vocational education; 2) state government divisions with responsibilities in general elementary and secondary programs, employment service, and finance; 3) Chief State School Officers; and 4) others. It will analyze FY 1974 data and subcontract for an analysis of all four years of data.

EXPECTED CONTRIBUTION TO EDUCATION

Development of a national data base of vocational education information.

INTERAGENCY TRANSFER OF FUNDS

PROJECT TITLE:	Development of School-to-Work Job Placement Curriculum
PRINCIPAL INVESTIGATOR AND ORGANIZATION:	Ruth Tangman National Advisory Council on Vocational Education 425 13th Street, NW, Suite 412 Washington, D.C. 20004 (202) 376-8873
FUNDING PERIOD:	July 1, 1975 - March 31, 1976

OBJECTIVES

The purpose of the project is to test the feasibility of providing school-based placement services on a widespread basis as a followthrough from previous Council deliberations with OE and OEO.

PROCEDURES

Originally begun in FY 1972, the project has already proceeded through two of its three phases--research (November 1972-March 1974) and development and testing of curriculum materials for persons involved in establishment of school-based placement programs (July 1974-October 1975). The second phase was conducted by the National Association of Industry-Education Cooperation. The projected timeline for the third phase is July 1, 1975 through March 31, 1976. During this phase, materials developed during the second phase will be disseminated under an agreement with the National Association for Industry-Education Cooperation. Materials will be presented to the State departments of education, followed by requests to the state departments for commitments to initiate training programs for placement specialists. Technical assistance in the establishment of such training programs will be made available upon request.

EXPECTED CONTRIBUTION TO EDUCATION

1) Provision of instructional materials for initiating or strengthening school-based placement programs for those school systems which wish to provide such services.
2) Determination of the feasibility of providing school-based placement services as part of the regular high school curriculum.

APPLICATION NUMBER: 498AH60356 CONTRACT NUMBER: 300760410

PROJECT TITLE: A Model for Determining the Added Cost of Vocational Education

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Kern Alexander, Director
Institute for Educational Finance
University of Florida
1212 S.W. 5th Avenue, Apt. #6
Gainesville, Florida 32601 (904) 392-1481

FUNDING PERIOD: August 15, 1976 - August 14, 1977

OBJECTIVES

Three primary objectives guide the thrusts of this project:

1) To develop a model for calculating the excess costs on a full-time equivalent per student basis of vocational-technical education courses and programs offered at public, secondary and postsecondary institutions.
2) To field test the model developed that determines excess cost of vocational-technical education courses and programs in a sample of school districts and postsecondary schools.
3) To prepare a user's manual of instruction that describes and illustrates how the model can be applied to determine excess cost elements and compare excess costs to basic program costs.

PROCEDURES

Model development activities are guided by the data capabilities and process characteristics sections of RFP 76-29. Generally, standard terminology and procedures provided in various USOE handbooks will be utilized to model the relationships between pupil accounting, cost accounting, educational programming, and management locations. Data from a sample of nine or 10 postsecondary institutions in four or more states will be utilized to test and refine the cost model. Based upon the field-test results the model will be fully explicated in a user's manual.

EXPECTED CONTRIBUTION TO EDUCATION

The excess cost model will enable a more careful review of vocational, technical program costs at the local school districts, the state education agencies, and the U.S. Office of Education. Potential application of the user's manual includes approximately 17,000 public school districts and 1,200 postsecondary institutions offering vocational-technical training, and 50 State departments of education.

APPLICATION NUMBER: 498AH60377 GRANT NUMBER: 300760461

PROJECT TITLE: Minority Business Ownership and Management: A Pilot Education and Training Program for Persons in Georgia Correctional Institutions

PRINCIPAL INVESTIGATOR AND ORGANIZATION:

Larry Gibson
Southern Rural Action, Inc.
1202 West Marietta Street, NW
Atlanta, Georgia 30318 (404) 799-8381

FUNDING PERIOD: October 1, 1976 - September 30, 1977*

OBJECTIVES

The purpose of this project is to aid the rehabilitation process of selected minority persons in Georgia correctional institutions by providing them with vocational education and training, motivation, and other assistance essential to business ownership and management.

PROCEDURES

1) Obtain written agreements of cooperation from appropriate correctional institutions officials.
2) Identify persons from correctional institutions/community release centers best suited to be channeled into the program on a release-time basis.
3) Design curriculum materials, instructional plan, and related procedures and materials.
4) Develop and operate a plan for creating business development opportunities in the above areas for trainees who express the desire and demonstrate the potential for business ownership.
5) Conduct vocational education, training, and related services as required to equip trainees with the knowledge required.
6) Develop and operate a plan to create business management or business employment opportunities for trainees who cannot, or do not desire, to pursue business ownership initially.
7) Successfully negotiate arrangements with CETA and/or LEAs to provide stipends for persons selected.
8) Conduct formative and summative evaluation of the program.

EXPECTED CONTRIBUTION TO EDUCATION

This project will demonstrate the potential for providing selected persons in correctional institutions with the knowledge and skills of vocational education necessary to pursue business ownership, business management, or business employment as part of the rehabilitation process. It will also demonstrate the potential for utilizing organizations experienced and committed to the development of small minority business to use their expertise in the motivation and preparation of incarcerated persons to achieve entrepreneurial skills.

*Funding received during the transition quarter.

APPLICATION NUMBER: 498AH60380 **CONTRACT NUMBER:** 300760468

PROJECT TITLE: Survey to Update Definitions of Vocational Education Programs for Revising the Document *Vocational Education and Occupations*

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Daniel B. Dunham
State Director of Vocational Education
Maryland State Department of Education
Baltimore, Maryland 21201 (301) 796-8300 ext. 400

FUNDING PERIOD: September 26, 1976 - June 26, 1977

OBJECTIVES

The purpose of the project is to redefine the narrative descriptions of the vocational instructional program codes provided in the publication *Vocational Education and Occupations* as they relate to the *Dictionary of Occupational Titles* codes.

PROCEDURES

1) Appoint a program manager to monitor, schedule, and compile various reports required in the study.
2) Identify six to eight states and/or local experts in each occupational area to provide specific input in the program description.
3) Distribute pertinent sections of *Vocational Education Occupations* codes, titles, and definitions to selected states and/or local experts with instructions to research local program areas and recommend revisions in the definitions.
4) Assemble each group of experts in Washington, D.C., by program area to screen research activities and draft revised instructional program definitions.
5) Prepare draft revision of each instructional program area definitions by major occupational area.
6) Assemble selected local/state experts in each program to identify and/or resolve areas of specific conflict.
7) Send combined draft of revised codes, titles, and programs to selected industries, business and professional associations, and state and local education agencies for comments.
8) Prepare a final report from the input from the above areas to the Department of Health, Education, and Welfare.

EXPECTED CONTRIBUTION TO EDUCATION

Clarification of the coding system, coupled with the identification of new and emerging occupations, will assist in the drafting of new statements describing vocational education programming.

APPLICATION NUMBER: 498AH60413 CONTRACT NUMBER: 300760431

PROJECT TITLE: The Development of Sample Designs for the Follow-Up of Vocational Education Graduates

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Lance Hodes, Director of Educational Services
Westat Research, Inc.
11600 Nebel Street
Rockville, Maryland 20852 (301) 881-5310

FUNDING PERIOD: October 1, 1976 - September 30, 1977*

OBJECTIVES

1) Develop sample designs for each state and outlying area which would allow them to survey the vocational graduates and students who have completed vocational programs in order to collect statistically valid data for program and policy needs.
2) Develop sampling procedures that will provide a process for the selection of the population to be surveyed.
3) Provide a package of followup instruments that will be useful in the data collection process.

PROCEDURES

In order to accomplish the project objectives four major activities comprising ten tasks will be undertaken. Activity I will develop the followup requirements by reviewing the literature, defining followup issues, reviewing exemplary programs, and defining terms. Activity II will develop a sample model, the individualized sample designs, and instrument package for data collection. Activity III will provide for a small field review of the designs and procedures, and Activity IV will report on the designs and the findings of the field review.

EXPECTED CONTRIBUTION TO EDUCATION

This contract will produce a sample design for each State to assist it in the conduct of followup studies to assess the effectiveness of its vocational education programs. These designs and the accompanying procedures and instruments for implementation will provide a basis for States that have not already done so, to begin to determine the quality of their vocational programs in an accurate, systematic, and cost effective manner. For those States that have already developed and implemented followup programs, this project will provide them with an additional resource that would allow them to strengthen their program and enrollment projections and their estimates of labor market supply.

*Funding received during the transition quarter.

INTERAGENCY TRANSFER OF FUNDS NUMBER: A0076028

PROJECT TITLE:	National Information System for Occupational and Adult Education
PRINCIPAL INVESTIGATOR AND ORGANIZATION:	Jerome Svore, Regional Administrator Environmental Protection Agency, Region VII 1735 Baltimore Street Kansas City, Missouri 64108 (816) 374-5993
FUNDING PERIOD:	May 1, 1976 - September 30, 1977

OBJECTIVES

In anticipation of the Vocational Education Amendments of 1976 - HR12835, the project will develop an operational, prototype National Information System for Occupational and Adult Education (NISOAE) which provides major policymakers for vocational education in America (the Congress, the National Advisory Council, the National Commission for Manpower Policy, the National Occupational Information Coordinating Committee, the National Institute for Education, the Bureau of Occupational and Adult Education, the United States Office of Education and the states) a hands-on experience from which to specify operational NISOAE, which simultaneously meets most of the information requirements for national planning and serves as a model for state planning.

PROCEDURES

1) Develop an operational prototype on INFONET (the computer time sharing system of the National Center for Educational Statistics charged by the proposed Amendments with responsibility to operate NISOAE) which includes national, longitudinal data files that describe school-career relations (Project TALENT, the National Longitudinal Study, and the cooperative Institutional Research Program of the American Council on Education) and manpower projection data of the Bureau of Labor Statistics with the EDSTAT files of NCES.
2) Develop an index to these files so they can be easily accessed by policymakers.
3) Develop a forecast capability to predict occupational education futures from knowledge of past school-career relationships.
4) Conduct workshops for the policymakers named above.
5) Prepare a report which specifies the information needs, including analytical modeling and computing requirements, of occupational education policymakers which result from direct experience on a "state of the art" system. Previous surveys will be reflected in the final report.

EXPECTED CONTRIBUTION TO EDUCATION

A national consensus on a specific blueprint for bringing online a national information system to support policymaking for vocational education in America.

APPLICATION NUMBER: 498AH60378 CONTRACT NUMBER: 300760465

PROJECT TITLE: Process Assessment of MERC

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Jack Davis
Sierra Research/Planning Associates
Box 8083, University Station
Reno, Nevada 89507

FUNDING PERIOD: September 30, 1976 - December 31, 1976

OBJECTIVES

1) Assess the State Management Evaluation Reviews for Compliance (MERC) to determine the relative soundness and feasibility of continuing the program.
2) Determine ways in which the MERC process can be improved.
3) Identify state costs in preparing for, and participating in, the MERC program.
4) Identify the benefits to the states as the result of the MERC visits already conducted.
5) Provide a basis for recommendations for proficient procedures which may be implemented through state management evaluations proposed by forthcoming legislation.

PROCEDURES

The procedure for conducting this assessment will involve personal interviews with approximately 60-75 people affected by MERC. These interviews will be conducted utilizing a predetermined interview schedule. The interviewees will be those persons who participated in the MERC reviews and those potentially affected by them. Of the eight states which have already been reviewed, the project staff will select five in which to conduct interviews. Additionally, the principal investigator will accompany the MERC team on one of their upcoming MERC visits in October or November of 1976. The results of these interviews and observations will be compiled and reported on a per item basis with recommendations for improvement as stated in the objectives.

EXPECTED CONTRIBUTION TO EDUCATION

This process assessment of MERC is expected to have wide-ranging influence on the improvement of vocational education program management in each state. It is the role of the state to provide leadership to local educational agencies, and this assessment will yield data and recommendations that will allow the states to improve their capabilities of leadership with local education agencies (LEAs). Additionally, the MERC process itself may be made more streamlined and less costly through improvement.

APPLICATION NUMBER: 498AH60376 **CONTRACT NUMBER:** 300760460

PROJECT TITLE: Guidelines for Non-Sexist Vocational Education Materials

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Ann Stefan
Women on Words and Images, Inc.
P.O. Box 2163
Princeton, New Jersey 08540

FUNDING PERIOD: October 1, 1976 - September 30, 1977

OBJECTIVES

This project will develop and validate guidelines which will ensure that vocational materials developed under Bureau of Adult Education (BOAE) auspices are free of sex bias. The guidelines will serve a three-fold purpose:

1) Provide a guide for development of any materials resulting from BOAE contracts or grants for materials development.
2) Provide a checklist for evaluation of materials developed under BOAE contracts or grants.
3) Serve as a guide for the examination of existing curricula or other materials being used in vocational education classrooms.

PROCEDURES

In order to develop the guidelines, Women on Words and Images will examine a sample of existing vocational education materials for sex bias to identify examples. These materials will be both commercially produced and those produced with BOAE funding. Some available guidelines relating to sex bias will be examined, both from producers of vocational education materials and from representative state education departments. After development of a preliminary draft, the guidelines will be validated and perfected by a review of nine selected recipients of BOAE funding and nine State Directors of Vocational Education Departments.

EXPECTED CONTRIBUTION TO EDUCATION

The presentation of nonsexist vocational education materials will encourage all vocational education students to develop to their fullest potential.

APPLICATION NUMBER: 498AH60354	CONTRACT NUMBER: 300760083

PROJECT TITLE: Minority Enterprise Program for the Fashion Industry

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Marvin Feldman, President
Fashion Institute of Technology
227 W. 27th Street
New York, New York 10001 (212) 760-7660

FUNDING PERIOD: April 19, 1976 - April 18, 1977

OBJECTIVES

The objective is to demonstrate whether minorities can achieve successful entry into the fashion industry as business owners through an intensive management training program on specific areas of administration and operation of a fashion industry business firm, and through practical knowhow and wisdom provided to the minorities by successful representatives from the fashion industry and the teaching staff of Fashion Institute of Technology.

PROCEDURES

1) Special seminars on eight different major management topics.
2) One-to-one counseling.
3) Provision of technical assistance to designers including use of showroom space and work space.
4) Exposure to leading representatives from the fashion industry including buyers, designers, and production and union experts.

EXPECTED CONTRIBUTION TO EDUCATION

Demonstration of the potential use of vocational and other types of educational institutions coupled with assistance from industry as a practical resource to assist minorities in entering a highly selective and competitive industry.

APPLICATION NUMBER: 498AH60028 CONTRACT NUMBER: 300750141

PROJECT TITLE: AIM/ARM: Abstracts of Instructional and Research Materials in Vocational and Technical Education

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Joel H. Magisos, Associate Director
The Center for Vocational Education
The Ohio State University
1960 Kenny Road
Columbus, Ohio 43210 (614) 486-3655

FUNDING PERIOD: February 29, 1976 - February 28, 1977*

OBJECTIVES

The purpose of the project is to achieve effective use of research reports, program descriptions, and instructional materials by educational researchers, developers, practitioners, and others who work to improve and extend vocational and technical education. The project's objectives are to prepare information about completed and ongoing research and curriculum development for AIM/ARM, a nationally distributed abstract publication; conduct searches and prepare interpretative papers for the sponsor; and link to other elements of the national information network. In addition, the project is to develop a report of projects funded by the Division of Research and Demonstration (USOE/BOAE).

PROCEDURES

The project will link to the information network for vocational education; prepare materials for computer input to AIM/ARM; prepare, reproduce, and distribute AIM/ARM; conduct searches for USOE/BOAE; prepare interpretative papers and bibliographies; input material to the Smithsonian Science Information Exchange and the Educational Resources Information Center (ERIC); analyze, synthesize, and disseminate information about manpower information systems and the recent assessment of vocational education R & D. Proposals and supplemental information about funded projects will be abstracted for inclusion in the special report on funded projects.

EXPECTED CONTRIBUTION TO EDUCATION

Researchers and curriculum developers will be enabled to keep abreast of complete and ongoing work. Educational policy and decisionmakers will be enabled to find research-based solutions to critical problems. Educational practitioners will be enabled to access available instructional materials. An available record of funded projects will exist.

*Funding received during the transition quarter.

APPLICATION NUMBER: 995AH50106 CONTRACT NUMBER: 300750363

PROJECT TITLE: A State Management Information System Needs Study and a National Needs Assessment of Career Guidance

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Donald C. Findlay, Associate Director
The Center for Vocational Education
The Ohio State University
1960 Kenny Road
Columbus, Ohio 43210 (614) 486-3655

FUNDING PERIOD: July 1, 1975 - February 28, 1977*

OBJECTIVES

State MIS Needs Study: To 1) assess the extent to which states with Part C funded projects have improved their MIS capabilities; 2) assess the status of MIS developments in Part C funded states in comparison with nonfunded states; 3) identify exemplary MIS systems or exemplary features of MIS in the states and constraints inhibiting the implementation or upgrading of MIS by states; and 4) produce a set of recommendations for meeting state management information system needs.

Career Guidance: To conduct a national needs assessment of career guidance, K through adult.

PROCEDURES

State MIS Needs Study: Assessment will be made of changes in MIS capabilities in states funded under Part C for that purpose, and of differences in MIS comprehensiveness and utility between Part C funded and balance of states. Exemplary vocational education MIS or features of such systems in the states will then be identified as will constraints to implementation or upgrading of MIS by states.

Career Guidance: A national survey will be made of state comprehensive career guidance plans along with an identification of career guidance needs as reflected in a review and synthesis of the professional literature. These efforts will be followed by an identification of obstacles and impediments to the implementation of comprehensive career guidance, placement and follow-through services, and an assessment of counselor education programs at colleges and universities. Findings will then be analyzed to identify exemplary career guidance methods, practices, comprehensive programs, and dissemination strategies as well as evaluation tools and techniques.

EXPECTED CONTRIBUTION TO EDUCATION

The MIS study will provide a set of recommendations regarding future directions for meeting state management information system needs.

The Career Guidance study will identify needed changes in the training and retraining of career guidance professionals and paraprofessionals.

*Funding received during the transition quarter.

APPLICATION NUMBER:	498AH60366	CONTRACT NUMBER:	300760096
PROJECT TITLE:	Identifying and Validating Essential Competencies Needed for Entry and Advancement in Major Agriculture and Agribusiness Occupations.		
PRINCIPAL INVESTIGATOR AND ORGANIZATION:	David R. McClay, President Instructional Consulting and Research Associates, Inc. 732 Holmes Street State College, Pennsylvania 16801 (814) 237-3119		
FUNDING PERIOD:	May 17, 1976 - November 16, 1977		

OBJECTIVES

This project provides a director to coordinate the completion of the work of Agricultural Education leaders in 45 universities and colleges over the nation involved in the National Agriculture/Agribusiness Occupations Competency Study. Specific objectives of this national study are to develop a listing of validated competencies for agricultural occupations in seven broad instructional areas: production, supplies and services, products, forestry, ornamental horticulture, mechanics, and resources.

PROCEDURES

All institutions are following these procedural steps in this study:

1) Skilled, technical, or mid-management occupations under the seven instructional areas in agriculture/agribusiness which employ the most workers are identified and selected for study.
2) Essential agriculture/agribusiness competencies needed for entry employment and advancement are identified for each occupation by job and task analysis.
3) A local Employee-Employer Review Group (EERG) is employed in the pilot study phase to review and revise the survey questionnaire.
4) National validation for all competencies under each occupation is obtained from workers employed in the occupation or their work supervisors according to a 4-3-2-1 scale with 4 being "essential" and 1 "not important." Means are computed for each competency.
5) A final report including validated competencies for all occupations surveyed will be prepared and disseminated to all states.

EXPECTED CONTRIBUTION TO EDUCATION

The final report will provide educators over the nation a listing of over 200 agriculture/agribusiness occupations with validated competencies for each. This information can improve the preparation of vocational teachers, and update vocational and technical school programs at all levels nationwide in agriculture/agribusiness occupations.

APPLICATION NUMBER: 498AH60414 **CONTRACT NUMBER:** 300760432

PROJECT TITLE: Minority Business Ownership and Management: A Pilot Education and Training Program for Persons in South Carolina Correctional Institutions

PRINCIPAL INVESTIGATOR AND ORGANIZATION:

M. Lee Montgomery, Executive Vice President
Spectrum, Inc.
P.O. Box 11726
1518 Pine Street
Columbia, South Carolina 29211 (803) 254-6919

FUNDING PERIOD: September 30, 1976 - September 30, 1977*

OBJECTIVES

1) Design an education/training program which will demonstrate that selected inmates in the South Carolina Department of Corrections, can, with the necessary knowledge and skills, pursue a career in small business ownership or management as a part of the rehabilitation process.
2) Demonstrate that Spectrum, with its consultants and its sub-contractors who have experience and expertise in ownership, operations and management of small businesses owned by disadvantaged persons, has the skills to motivate and train incarcerated persons on a selected basis to pursue a career in small business ownership or management.
3) Expand the options of the incarcerated person by introducing an education/training program in small business ownership and management which increases the opportunities of the disadvantaged persons and at the same time reducing unemployment for ex-offenders.

PROCEDURES

The selected inmates in the South Carolina Department of Corrections will be given practical preparation in the acquisition of knowledge and skills in small business ownership or management. Intensive seminars will be conducted in motivation, self development, business planning, business development, financing, accounting, marketing, public relations and management. The curriculum will be designed to impart knowledge and skills along with a bridge to business and industry assistance for practical implementation of small business opportunities. An intensive counseling and career development program will be implemented to maximize small business opportunities.

EXPECTED CONTRIBUTION TO EDUCATION

Small business education/training will become an integral part of the South Carolina Department of Corrections educational program, with a selected number of inmates able to enter into small business ownership or management upon completion of their incarceration.

*Funding received during the transition quarter.

APPLICATION NUMBER: 498AH60002 **GRANT NUMBER:** 300760085

PROJECT TITLE: Career Awareness and Minority Business Enterprise and Management, High School Level

PRINCIPAL INVESTIGATOR AND ORGANIZATION:

Robert A. Turpin, Jr.
Charisma Enterprises, Ltd.
1108 East Main Street, Suite 810
Richmond, Virginia 23219 (804) 649-7611

FUNDING PERIOD: April 5, 1976 - April 4, 1977

OBJECTIVES

1) Create an innovative curriculum at the high school level for students in the Richmond Public Schools which will enhance their awareness and appreciation of business enterprise.
2) Achieve a level of student awareness of business enterprise which will encourage their consideration of business ownership as a viable career option.
3) Introduce to the students the primary forms of business ownership and basic management principles.
4) Present to the students successful business persons as role models.

PROCEDURES

To accomplish the stated objectives of the project, Charisma formed a curriculum team composed of members of its own staff, personnel from the school system, and persons from the local business community. After orientation of the team and subsequent agreement on project goals, the Charisma staff assumed primary responsibility for researching data and developing the curriculum. The team selects the target school, reviews curriculum draft, approves curriculum, oversees implementation, and monitors and evaluates classroom presentation. Business persons, especially minorities, and field trips will supplement classroom instruction.

EXPECTED CONTRIBUTION TO EDUCATION

As a result of the project, Richmond Public Schools will have a career awareness curriculum in business enterprise and management to offer to 9,606 high school students of whom 78 percent are black. The curriculum will have valuable utility nationally at the secondary level, especially where there are significant numbers of minority students.

APPLICATION NUMBER: 498AH60364 **CONTRACT NUMBER:** 300760364

PROJECT TITLE: Develop a Model to Recruit and Retrain Women Teachers to Teach in Male Intensive Occupational Programs

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Roslyn D. Kane, President
Rj Associates, Inc.
1018 Wilson Boulevard
Arlington, Virginia 22209 (703) 524-3360

FUNDING PERIOD: July 1, 1976 - June 30, 1977

OBJECTIVES

There is a continuing absence of women teachers in male-intensive occupations. Young women who might consider careers in such programs are inhibited in seeking enrollment because there are no successful role models for them to emulate. This current need for female role models comes at a time when there are teacher shortages in some of these occupations and teacher surpluses generally. These three problems form the basis for this project to develop a model for the recruitment and retraining of women teachers to teach in male-intensive occupational programs.

PROCEDURES

The project involves three major tasks:

1) Identification of data on teacher supply and demand in male-intensive occupational programs for the 50 states and an analysis of certification and credentialing problems and means to accomodate them.
2) Development of a model to recruit and retrain women teachers and skilled women who are working in male-intensive occupations in industry to teach in secondary level male-intensive programs.
3) Development of two course outlines of study and training programs for retraining women teachers in two occupational categories, one in Industrial Arts and the other in Trade and Industrial areas.

EXPECTED CONTRIBUTION TO EDUCATION

The program offers an immediate and pragmatic solution to emerging employment problems of women teachers. It promises to eventually place women in positions in which they can serve as positive role models for women students selecting training in secondary schools for male-intensive occupations.

PART D: DEMONSTRATION

Priority: Experience-Based Career Education

APPLICATION NUMBER: 502AH60066 GRANT NUMBER: G047603000

PROJECT TITLE: Implementation of Experience-Based Career Education

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Wayne Pope, Superintendent
Conecuh County Board of Education
Department of Career Education
P. O. Box 150
Evergreen, Alabama 36401 (205) 578-1752

FUNDING PERIOD: September 28, 1976 - September 27, 1979

OBJECTIVES

The project objectives are to enable students to integrate career decision-making skills, basic skills, life skills, and job-related skills in such a way that they can make a vocational decision that will lead directly to college, vocational-technical school, or job entry.

PROCEDURES

Developed around the Northwest Regional Educational Laboratory model, the Experience-Based Career Education (EBCE) program will be student centered. Diagnostic data will be gathered to develop a student profile. From this a learning plan is negotiated between the student and staff based on a continuous process of assessment, prescription, evaluation, and integration. The curriculum involves integration of instruction in basic skills (math, social studies, communication, and science), life skills (e.g. personal, social and citizenship development), and career development (through career exploration experiences in the community). A mobile classroom will serve as a learning center at each of four high schools, headquarters for participating students from that school. The Appalachia Educational Laboratory will conduct a third-party evaluation of the project.

EXPECTED CONTRIBUTION TO EDUCATION

1) Issuance of a high school diploma that is backed by experience that lends credibility to the diploma.
2) Dissemination of program procedures and results to interested agencies or groups.
3) Reduction in the youth unemployment rate in the area.

APPLICATION NUMBER: 502AH60012 GRANT NUMBER: G310760051

PROJECT TITLE: Demonstration of NIE's Experience-Based Career Education Program

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
David Dole, Guidance Director
Portland Board of Education
P. O. Box 231
Portland, Connecticut 06480 (203) 342-1640

FUNDING PERIOD: September 1, 1976 - August 31, 1979

OBJECTIVES

Specific objectives, each related to anticipated student outcomes, are to:

1) Provide a bridge between career-oriented and academics-oriented educational acitivities.
2) Provide students with the personal attitudes and skills required to make effective career decisions.
3) Expand and focus student career aspirations.
4) Increase student motivation to learn and achieve.
5) Increase cooperation between the educational and manpower institutions.
6) Broaden occupational opportunities for youth.
7) Provide expanded learning opportunities to students who are academically, socioeconomically, and otherwise handicapped.

PROCEDURES

Major procedures are those provided by the Appalachia Educational Laboratory Experience-Based Career Education (AEL/EBCE) model, which includes a process for organizing and defining the community for learning purposes; a process for developing, maintaining, evaluating, and updating students' programs on an individualized basis; and a process for managing the total EBCE program for accountability. About 50 students will experience documented career and academic experiential learning in the community. Community advice and support will be established through an advisory committee representative of community groups.

EXPECTED CONTRIBUTION TO EDUCATION

The Portland School District will seek to institutionalize the EBCE program as an educational alternative for students in Connecticut through eventual creation of a network of EBCE sites and committed institutions across the State.

APPLICATION NUMBER: 502AH60038 GRANT NUMBER: J037600229

PROJECT TITLE: Experience-Based Career Education (EBCE)

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Loren J. Thompson, Director of Instruction
Newark School District Board of Education
P. O. Box 360
Newark, Delaware 19711 (302) 731-2200

FUNDING PERIOD: September 1, 1976 - August 31, 1979

OBJECTIVES

The purpose of the project is to provide an alternative program for high school students which will result in a higher level of knowledge and understanding of the relationship between their academic, career, and interpersonal skills and their ultimate success in careers than that of young people in a traditional education program.

PROCEDURES

The Newark School District will adapt and demonstrate the Experience-Based Career Education (EBCE) model, "Community Experience for Career Education", developed by the Northwest Regional Educational Laboratory. The District will establish, maintain, and utilize a network of employer and community sites for student learning activities, with each participating student adapting an instructional program which correlates learning activities in the community with program-defined life skills, basic skills, and career development. A student's activities for each year include 10 projects in specific skill areas and 5 career explorations which demonstrate adequate use of employer/community site resources and opportunities to the satisfaction of staff and employer instructors. Approximately 60 students will be involved in the first year (20 in each of three high schools), 120 in the second year, and 180 in the third.

EXPECTED CONTRIBUTION TO EDUCATION

Alternative strategies will be developed for demonstration and dissemination of EBCE to educational personnel throughout the State of Delaware.

APPLICATION NUMBER: 502AH60087 GRANT NUMBER: J037600226

PROJECT TITLE: An Experience-Based Career Education Program for Students in the Comprehensive High Schools

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Ellen F. Datcher
District of Columbia Public Schools
415 12th Street, NW
Washington, D.C. 20004 (202) 724-4173

FUNDING PERIOD: September 1, 1976 - August 31, 1979

OBJECTIVES

The goal of the program is to implement a comprehensive, individualized alternate plan of full-time learning for high school students which relies upon active participation of the community to provide direct, nonpaying learning experiences in real-life settings as preparation for future careers.

PROCEDURES

The Experience-Based Career Education (EBCE) model developed and tested by the Far West Regional Laboratory will be adapted to meet the needs of District of Columbia students. Key features include 1) enlistment of competent adults from all sectors of the community as partners in the educational process; 2) redefinition of the role of school staff and students in planning and carrying out individualized learning plans geared to academic, interpersonal, career, and basic skills development; and 3) provision of learning activities primarily at resource sites in the community supported and supplemented by staff and materials at an EBCE learning center close to the two participating high schools. Students will be recruited from the 10th and 11th grades on a voluntary basis. The program will serve 100 students in the first year, 200 in the second, and 400 in the third. First-year activities will include recruitment and training of the staff (including program director, resource analyst, and learning coordinator), selection of a community advisory committee, development of the implementation design and program, and securing of a third-party evaluator.

EXPECTED CONTRIBUTION TO EDUCATION

A plan will be provided for the assimilation of the EBCE model into the ongoing program of the District of Columbia Public Schools.

APPLICATION NUMBER: 502AH60016 GRANT NUMBER: G047603001

PROJECT TITLE: Demonstration of the National Institute of Education's Experience-Based Career Education

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Ronald L. Fritchley
Coordinator, Career and Vocational Education
Pioneer Cooperative Educational Service Agency
P. O. Box 548
Cleveland, Georgia 30528 (404) 865-2141

FUNDING PERIOD: September 1, 1976 - August 31, 1979

OBJECTIVES

The purpose of the project is to implement and demonstrate the Far West Laboratory (FWL) Experience-Based Career Education (EBCE) model in such a way that students will show growth in the areas of basic skills, self-development, career awareness, decisionmaking, interpersonal skills, and problem solving.

PROCEDURES

Pioneer Cooperative Education Service Agency will serve as fiscal agent and program manager to implement the program in the three Hall County high schools during the first year. Gainesville City and Union County high schools will be added the second year, and all high schools will be operating the third year. Project staff will be trained by FWL in resource development and student project planning. Operation of the model is based on communication, cooperation, and balance between the EBCE school site and resource sites in the community where students observe and participate in career exploration observation and work experiences. In individual and group sessions at the school site students and learning coordinators plan, discuss, and evaluate learning activities that utilize community resource people, organizations, and other resources. Students will receive credit toward satisfying requirements for a high school diploma for participation in the program. The Northwest Regional Educational Laboratory will conduct a third-party evaluation covering processes, products, and student outcomes in basic skills, career development, and integration of the two.

EXPECTED CONTRIBUTION TO EDUCATION

The Georgia Facilitator and National Diffusion Networks will be utilized to disseminate curriculum and staff development materials and processes and other products and results so that EBCE programs may be adapted at other sites.

APPLICATION NUMBER: 502AH60019 GRANT NUMBER: G097600182

PROJECT TITLE: Holomua Project

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Kiyoto Mizuba
Hawaii State Department of Education
Hawaii Administrative District
P. O. Box 2360
Honolulu, Hawaii 96804

FUNDING PERIOD: September 1, 1976 - August 31, 1979

OBJECTIVES

The purpose of this project is to implement and demonstrate an alternative educational program for 165 high school students in which they will have the opportunity to better prepare and develop post-high school career plans through direct contacts with adults in real work situations located throughout the community of Hilo.

PROCEDURES

The Experience-Based Career Education (EBCE) project will involve the participation of various elements of the community through a community advisory board, which will provide advice and assistance to the Hawaii State Department of Education District Office, which will administer the project. Career stations within the community, provided by cooperating employers from the public and private sectors, will enable participating students to explore and experience various occupations. In addition to career exploration experiences, the program will emphasize individually prescribed instruction and basic academic skills relevant to specified career plans. Instruction in life survival skills, (e.g. personal care and health, budgeting and finance, citizenship) will also be included. Research activities will be organized and conducted by a third-party evaluator.

EXPECTED CONTRIBUTION TO EDUCATION

Dissemination activities will be conducted so that other education personnel throughout the state may replicate and expand successful program features.

APPLICATION NUMBER: 502AH60060 GRANT NUMBER: G107600076

PROJECT TITLE: Experience-Based Career Education Implementation and Demonstration Project

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Paul Matthews
Pocatello School District No. 25
P. O. Box 1766
Pocatello, Idaho 83201

FUNDING PERIOD: September 1, 1976 - August 31, 1979

OBJECTIVES

This project is designed to provide young people in the District's schools with a full-time alternative educational program in which student participants will be awarded credit toward high school graduation requirements. Specific objectives are to:

1) Increase student abilities in basic skill areas.
2) Increase knowledge of the world of work and of career development processes and practices.
3) Increase life skills essential for transition into adulthood.
4) Develop in young people, parents, community resource people, and employees of participating students a positive attitude toward the program.

PROCEDURES

The Experience-Based Career Education (EBCE) model developed in Tigard, Oregon under the sponsorship and technical assistance of the Northwest Educational Laboratory will be adapted to the needs of the school district and community of Pocatello. Components include use of 1) the Learning Plan Cycle to develop individual learning plans through a continuous process of assessment, prescription, evaluation, and integration, and 2) learning strategies such as career explorations, competency certification, and employer seminars to help students combine experience in life skills, basic skills, and career development.

EXPECTED CONTRIBUTION TO EDUCATION

The program may become a model for all school districts and communities in the State of Idaho by 1) contributing to reduced youth unemployment, 2) creating bridges between school and earning a living, and 3) serving youths who have academic, socioeconomic, or other handicaps.

APPLICATION NUMBER: 502AH60022 GRANT NUMBER: G057600215

PROJECT TITLE: Illinois Experience-Based Career Education Project

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Ronald D. McCage
Illinois State Board of Education
Department of Adult, Vocational and Technical Education
100 North First Street
Springfield, Illinois 62777

FUNDING PERIOD: September 1, 1976 - June 30, 1979

OBJECTIVES

1) Better coordinate the efforts of classroom, laboratory, and work experience education, both academic and vocational, to enable students to develop and carry out individualized learning projects in which they apply academic knowledge and skills to solve actual problems in community settings.
2) Allow students to utilize community resources for in-depth exposure to a broader spectrum of careers and to develop skills necessary for sound career choices.

PROCEDURES

The Illinois Office of Education (IOE) will implement, evaluate and diffuse a comprehensive Experience-Based Career Education (EBCE) program in three school districts. Staff in Sycamore C. U. School District 427 will be implementing EBCE materials developed by the Far West Educational Laboratory (FWEL) in one high school in a rural setting. Joliet Township High School District 204 will implement the FWEL materials in an urban community in three city high schools and two alternate schools under separate administrative heads. Decatur School District 61, a unit school district within an urban community, will use the Northwest Regional Educational Laboratory model in four high schools and two parochial schools through an Area Vocational Center. Thus, three distinct delivery systems will be used to provide individualized career exploration experiences for high school students in their respective communities. Educational Management Services, Inc., will evaluate the total project.

EXPECTED CONTRIBUTION TO EDUCATION

After two consecutive years of implementation, evaluation, and internal dissemination within the three districts, technical assistance teams comprised of representatives from each of the three agencies and spearheaded by the IOE will conduct regional awareness conferences/workshops for diffusing EBCE information.

APPLICATION NUMBER: 502AH60021 GRANT NUMBER: G077600090

PROJECT TITLE: An Experience-Based Career Education Project for a League of Secondary Schools in Merged Area V, State of Iowa

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Janet Huss
Career Education Division
Iowa Central Community College
330 Avenue M
Fort Dodge, Iowa 50501

FUNDING PERIOD: September 1, 1976 - August 31, 1979

OBJECTIVES

1) Demonstrate and evaluate the Experience-Based Career Education model developed by the Appalachia Educational Laboratory (EBCE-AEL).
2) Increase interaction between the school and the community in the education of their youth.
3) Provide for volunteer students, through experiential learning opportunities, an awareness of career opportunities other than that preferred by Iowa's traditional exploratory programs.
4) Demonstrate the EBCE-AEL model in a rural setting.
5) Help students achieve a series of specific career development goals.

PROCEDURES

Iowa Central Community College will act as the facilitator and provide the necessary staff and facilities for 33 local high schools to implement the EBCE-AEL model. Activities include 1) establishment of a steering committee of school administrators and business and industry leaders, 2) hiring and training of learning coordinators to facilitate activities of students, 3) orientation of and coordination with school administrative and guidance staffs, students, parents, and business and industry management personnel, and 4) conduct of the program in the College learning centers and at the local town experience sites.

EXPECTED CONTRIBUTION TO EDUCATION

1) Demonstration that the EBCE-AEL model can be adapted to serve the needs of students in the rural areas of Iowa.
2) Demonstration that this alternative education program through experiential learning activities will provide experiences for high school students which will help them make wise career choices.
3) Achievement of greater interaction between schools and communities in the education of youth.
4) Demonstration that this program is cost effective and organizationally compatible with existing school curriculum.

APPLICATION NUMBER: 502AH60070 GRANT NUMBER: G077600091

PROJECT TITLE: Wichita Experience-Based Career Education Project

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Kenneth G. Best, Coordinator of Career Education
Wichita Public Schools USD #259
428 South Broadway
Wichita, Kansas 67202

FUNDING PERIOD: September 1, 1976 - August 31, 1979

OBJECTIVES

1) Adopt the Appalachia Educational Laboratory's model of Experience-Based Career Education (EBCE) as a comprehensive alternative to high school by providing students with access to adults and adult environments throughout the community.
2) Provide for students, in addition to the basic academic skills, the development and refinement of career decisionmaking skills, job-related skills, and other life-role skills including those related to the family, community, and politics.

PROCEDURES

The first semester will be utilized in learning coordinator training, recruiting sites, site analysis, developing cross reference catalogs for each discipline, writing learning site experience guides, implementing the formative and summative evaluation plan, and other prerequisites to student participation. Each student will select or be assigned to a learning coordinator who will be responsible for the development of the individualized learning plans of approximately 25 students. Additionally, each learning coordinator will be a member of an interdisciplinary Learner, Instruction-Facilitator Team (LIFT) of approximately 300 students and 12 coordinators. The entire high school will then be comprised of six LIFTs with the potential for EBCE opportunities available to all 1800 students by the end of the third year.

EXPECTED CONTRIBUTION TO EDUCATION

Wichita High School East can serve as a demonstration site with the capability of offering technical assistance to others in Kansas and the Midwest who wish to adopt EBCE.

APPLICATION NUMBER: 502AH60002 GRANT NUMBER: G047603002

PROJECT TITLE: Experience-Based Career Education

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
E. B. Murphy
Fayette County Public School System
701 East Main Street
Lexington, Kentucky 40502

FUNDING PERIOD: August 1, 1976 - July 31, 1979

OBJECTIVES

The purpose of the project is to establish for high school juniors and seniors an alternative approach for completion of a substantial portion of the high school graduation requirements by earning required and elective course credits through community-based activities. Specific objectives are to 1) reduce the level of youth unemployment, 2) create viable working relationships between public education and manpower agencies, 3) broaden occupational aspirations and the opportunities for young people, and 4) provide appropriate educational service for young people who have academic, socioeconomic, or other handicaps.

PROCEDURES

The Experience-Based Career Education (EBCE) model developed and field tested by the Northwest Regional Educational Laboratory will be replicated in the four high schools in the school system with 50 to 60 students in the first year, 100 to 130 in the second, and 140 to 160 in the third. A variety of community employers, agencies, and businesses will cooperate in assisting students with community educational experiences. Students, with teacher directions, will have carefully developed individualized learning plans as a basis for activities which integrate basic academic skills, life skills (such as decisionmaking processes), and career development (e.g. identifying career interests and job skills). Students will have the opportunity to try out several career fields before deciding on a course of action after high school.

EXPECTED CONTRIBUTION TO EDUCATION

An operational EBCE program will continue after Federal monies cease, and program implementation information will be disseminated.

APPLICATION NUMBER: 502AH60047 GRANT NUMBER: G617600969

PROJECT TITLE: A Proposal to Implement an EBCE Model

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Houston C. Jenks, Supervisor of Special Funds
St. Charles Parish School Board
P. O. Box 46
Luling, Louisiana 70070

FUNDING PERIOD: September 1, 1976 - August 31, 1979

OBJECTIVES

In response to the need for effective transition from education to work, the project objectives are to:

1) Provide a cognitive and affective information base for students including life role and job-related skills.
2) Develop decisionmaking skills of students.
3) Increase academic proficiency in English and mathematics.

PROCEDURES

The Experience-Based Career Education model developed by Research for Better Schools, Inc. will be used to provide a program with three components:

1) Career Development provides experiential learning activities at community sites, allowing access to adults in the work environment. It includes exploration of job clusters and specialization in specific areas.
2) Career Guidance uses group counseling to impart decisionmaking skills. Procedures for self-assessment, organizing information, and values clarification are presented.
3) The Academic Resource Center offers individualized instruction in English and mathematics emphasizing student self-direction.

In the first year the program will be offered in one high school for 40 students. A second high school will be added the second year, increasing enrollment to 140 students. Capacity will increase to 240 in the third year.

EXPECTED CONTRIBUTION TO EDUCATION

An alternative to the vocational education experiences presently available to students.

APPLICATION NUMBER: 502AH60100 GRANT NUMBER: G310760050

PROJECT TITLE: Experience-Based Career Education

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Roy Bagley, Career Education Director
Maine School Administrative District No. 51
Main Street
Cumberland Center, Maine 04021

FUNDING PERIOD: July 1, 1976 - June 30, 1979

OBJECTIVES

1) Implement an Experience-Based Career Education (EBCE) model in Cumberland Center that will serve as an alternative to the standard high school program.
2) Demonstrate EBCE and provide technical assistance to potential adopters of EBCE, especially in Region I.

PROCEDURES

The Appalachia Educational Laboratory (AEL) will train staff members in the EBCE model developed at AEL. Each will be trained as a site analyst, prepared to develop community resources into learning sites for student career exploration activities, and as a learning coordinator, prepared to assist students in the development of individualized learning plans that integrate basic skills development with the career development components of the curriculum. Initially two staff members will be involved in resource site development and promotion of community, school and student awareness of the EBCE program. Two others will work on revising, adapting, and developing the curriculum to meet Greely High School guidelines and the EBCE model. In the first year 25 Greely High School students will be involved with learning coordinators and community resource people in implementation of the individualized learning process. The number of participating students will increase to 50 in each semester of the second year and to 70 in each semester of the third. Dissemination activities will include 2-week summer workshops for Region I schools. A third-party evaluation will be conducted by New Educational Directions.

EXPECTED CONTRIBUTION TO EDUCATION

Over the next three years staff will be trained so that five other EBCE sites will be established in Region I. Supportive data on the effectiveness of EBCE as an alternative to high school education will be disseminated to state career and vocational education personnel as well as to interested national offices.

APPLICATION NUMBER: 502AH60039 GRANT NUMBER: J037600231

PROJECT TITLE: Experience-Based Career Education

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
James W. Wilson
Director of Career Education Demonstration Project
Regional Education Service Agency
110 Washington Street
Cumberland, Maryland 21502 (301) 724-6190

FUNDING PERIOD: September 1, 1976 - August 31, 1979

OBJECTIVES

An alternative high school program will be offered to achieve these goals:

1) Provide a bridge between career-oriented and academics-oriented educational activities.
2) Provide students with personal attitudes and skills required to make effective career decisions.
3) Expand and focus student career aspirations and increase the employability and employment of each student.
4) Increase student motivation to learn and achieve.
5) Increase cooperation between educational and manpower institutions.
6) Broaden occupational opportunities for youth.
7) Provide expanded learning opportunities to students academically, socioeconomically, or otherwise handicapped.

PROCEDURES

The Agency will implement the Appalachia Educational Laboratory (AEL) Experience-Based Career Education (EBCE) model for students from two public and one parochial high school in Cumberland. Activities will take place at a former school used as a learning center and at various community experiential sites in the tri-state region. Learning coordinators and experience site analysts will be trained by processes developed by AEL to aide students in the development of individualized learning programs. These will include documented career exploration and academic experiences at various community sites for 2 to 13 weeks at each placement. Students will spend 1 day a week at the learning center in individual conferences with the learning coordinator. The West Virginia University Office of Education Research and Field Services will conduct a third-party evaluation.

EXPECTED CONTRIBUTION TO EDUCATION

The project will serve as a demonstration site for extending the EBCE model to all schools in Allegany and Garrett Counties including possible adaptation of the concept among the three community colleges, the State college, and the University.

APPLICATION NUMBER: 502AH60030 GRANT NUMBER: G057600214

PROJECT TITLE: Computerized Exploration of Community Experiences for Career Education

PRINCIPAL INVESTIGATOR AND ORGANIZATION:

Carol Berry Crowley, Career Education Specialist
Waterford School District
6020 Pontiac Lake Road
Waterford, Michigan 48095

FUNDING PERIOD: September 1, 1976 - August 31, 1979

OBJECTIVES

1) Provide a systematic and comprehensive program which integrates effective academic growth, career development, and personal/social maturation in such a way that students gain both personal satisfaction and preparation for success in adult roles.
2) Involve teachers in developing and implementing a program which meets the identified needs of the students.
3) Gain community cooperation in preparing students for their adult roles as satisfied and successful community members.

PROCEDURES

The Northwest Regional Educational Laboratory's model for Experience-Based Career Education (EBCE) will be adapted and installed in the Waterford School District. Basic curriculum components include 1) a program of individual student assessment; 2) use of assessment results in negotiation of individual learning plans by students and project staff; 3) short (3- to 5-day) and long (3- to 13-week) career explorations at community sites in which students encounter people, job tasks, tools, and resources related to occupations of interest; 4) special projects, also at community sites, designed to integrate academic and career education; 5) occupational information seminars of students and employers; and 6) weekly guidance group activities. Specific process models will be implemented for teacher involvement, community relations, project evaluation (by a third party), and dissemination.

EXPECTED CONTRIBUTION TO EDUCATION

The project will be transported to other Waterford High Schools so that the EBCE program will be an option for all students in the district. It will also serve as a model for agencies at the State or National level to modify or replicate.

APPLICATION NUMBER: 502AH60005 GRANT NUMBER: G077600092

PROJECT TITLE: Parkway Experience-Based Career Education

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
James M. Garrison, Director of Special Services
Parkway School District
455 North Woods Mill Road
Chesterfield, Missouri 63017

FUNDING PERIOD: July 1, 1976 - June 30, 1979

OBJECTIVES

1) Create bridges between school and earning a living, broadening occupational aspirations and opportunities for youth.
2) Promote cooperation between public education and manpower agencies.
3) Reduce youth unemployment through placement of graduates in an entry-level occupation or a postsecondary training program.

PROCEDURES

The Experience-Based Career Education (EBCE) model developed by the Northwest Regional Educational Laboratory will be implemented in the Parkway School District. The 300 participating students from the eight high schools involved (four public and four nonpublic) will receive diploma credit in academic subjects for completion of career exploration projects in the community. Individual content requirements will be negotiated with each student to organize activities at the work sites around the broad curriculum components of academic, career, and interpersonal skills. A central learning center will serve as home base for the learning experiences of all students. Community-school advisory and steering committees will operate the program under the direction of a program coordinator. Evaluative Research, Inc. will conduct a third-party evaluation.

EXPECTED CONTRIBUTION TO EDUCATION

The major product will be a manual describing the methods used to implement the EBCE model in a midwestern suburban school district. A statewide dissemination system will be developed through the Missouri State Department of Education.

APPLICATION NUMBER: 502AH60118 GRANT NUMBER: G077600093

PROJECT TITLE: Experience-Based Career Education (EBCE)

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Carl Spencer
City of Lincoln School District
P. O. Box 82889
Lincoln, Nebraska 68501

FUNDING PERIOD: August 16, 1976 - August 15, 1979

OBJECTIVES

The project goal is to adapt the Research for Better Schools model to the Experience-Based Career Education (EBCE) program for each high school and install the adaptations over a period of three years. The EBCE model is a comprehensive, individualized, alternative plan of learning which makes maximum use of resources in the community to provide direct experiences for development of career exploration, academic skills, and skills generally required for successful living.

PROCEDURES

The Lincoln EBCE plan has three elements: 1) guidance activities for all 10th grade students involving self-understanding, goal setting, and career education plans; 2) an alternative class schedule of 8-10 hours a week of career exploration experience at community sites, individualized instruction in basic academic areas, regular classes part of the day, and a continuing guidance program to integrate experiences; and 3) specialization experiences for those who want in-depth exploration of a specific career area. Major project activities include designing guidance, exploration, and specialization programs; locating community resources for exploration and specialization experiences; developing resource centers in each school; and providing leadership on district and local levels so that projects can operate with 150-200 students in each school year.

EXPECTED CONTRIBUTION TO EDUCATION

A program conceived of and operated as an integral part of total instructional services of each high school--a program unique to that school but consistent with the established set of characteristics of the EBCE model.

APPLICATION NUMBER: 502AH60040 GRANT NUMBER: G097600179

PROJECT TITLE: Rural/Secondary/Post-Secondary EBCE Demonstration

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
J. Clark Davis, Executive Vice-President
Western Nevada Community College
2201 West Nye Lane
Carson City, Nevada 89701

FUNDING PERIOD: September 1, 1976 - August 31, 1979

OBJECTIVES

1) Provide students an opportunity to learn the process of career decision-making by direct experience in the local community.
2) Give them opportunity to study their academics in the context of experience sites (a community business where students learn with assistance from one or more employees).
3) Help them become more responsible and mature and able to begin developing a conscious and consistent set of values.

PROCEUDRES

Implementation of the EBCE program will be based on the model developed by the Northwest Regional Educational Laboratory. Western Nevada Community College (WNCC) will administer the program in cooperation with three rural Nevada county school districts. The three high schools will make facilities available for project students which will be staffed by personnel from the College's comprehensive learning centers in each county. Project directors will 1) maintain liaison with the school districts, with the Northwest Regional Educational Laboratory for orientation, training, and technical assistance, and with an advisory committee on community needs; 2) select and supervise project staff in program development and administration; 3) coordinate program contacts with employers, parents and participating school districts, professional groups and agencies including labor, public/private schools, and governmental agencies; and 4) assist in selection of students and coordination of their activities.

EXPECTED CONTRIBUTION TO EDUCATION

Provision of an alternative to the traditional program for obtaining an accredited high school diploma.

APPLICATION NUMBER: 502AH60090 GRANT NUMBER: G617600965

PROJECT TITLE: Project EXCEL (Experience-Based Career Education Learning Program)

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Edward Fernandez, Director, Secondary Curriculum
Las Cruces School District No. 2
301 West Amador
Las Cruces, New Mexico 88001

FUNDING PERIOD: July 1, 1976 - June 30, 1979

OBJECTIVES

The purpose of this project is to link the instructional program to the knowledge needed for success on the job by combining a basic academic program (social studies, language, math, and science) with exploratory opportunities in the world of work.

PROCEDURES

Working with a wide spectrum of students from differing academic abilities and socioeconomic groups who have lost interest in traditional school programs, the project staff will divide its time between assisting students to meet high school requirements for graduation and helping them gain knowledge in the world of work through varied exploratory experience in different occupations in the private and public sector and within the school system. The project population will be drawn from the 11th and 12th grades of two Las Cruces high schools. Students will be referred by their counselors or principals and will be allowed to participate in the program with parental consent. Thirty students will be enrolled the first year, 60 the second, and 75 the third.

EXPECTED CONTRIBUTION TO EDUCATION

1) Reduction in the level of youth unemployment.
2) Creation of a bridge between school and earning a living.
3) Promotion of cooperation between public education and manpower agencies.
4) Broadening of the occupational aspirations and opportunities of youth.

APPLICATION NUMBER: 502AH60013 GRANT NUMBER: G057600216

PROJECT TITLE: Six Demonstration Programs for Career Exploration Through EBCE

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Jack D. Ford, Assistant Director
Career Development Service
Ohio State Department of Education
Division of Vocational Education
65 South Front Street
Columbus, Ohio 43215

FUNDING PERIOD: July 1, 1976 - June 30, 1979

OBJECTIVES

To provide the additional assistance needed in the "Career Education Continuum in Ohio" at Grades 9-10 for career exploration to receive full implementation, the Experience-Based Career Education (EBCE) program will assist to:

1) Identify and recruit community resources.
2) Organize information about community resources and schedule exploration experiences.
3) Train community resource site staff.
4) Provide the teaching staff an organized plan and instructional experiences for individual students.
5) Provide the counseling staff with a career clarification program and materials for helping students with job analysis and exploration selection.

PROCEDURES

Six Ohio local school districts (Akron, Dayton, Minford, Kirtland, Boardman, and Lorain) will implement the EBCE program developed by Research for Better Schools in Philadelphia. Each district will adapt the model to its present needs in relationship to the state program. Common elements of all programs, which will be monitored and evaluated by staff at the Ohio State Department of Education, include 1) exploration at community resource sites, 2) specialization opportunity, 3) site-analysis techniques, and 4) inservice training of community participants. The six participating districts will involve a total of 7,900 students in career exploration activities.

EXPECTED CONTRIBUTION TO EDUCATION

Outstanding practices resulting from the project will be shared with the 26 other local education agencies to assist in providing inservice and local planning for future implementation and expansion of career education in Ohio.

APPLICATION NUMBER: 502AH60076 GRANT NUMBER: G107600077

PROJECT TITLE: Experience-Based Career Education

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Ralph Humphrey, Director of Instructional Programs
Jackson County Intermediate Education District
101 North Grape Street
Medford, Oregon 97501

FUNDING PERIOD: September 1, 1976 - August 31, 1979

OBJECTIVES

The project will be a comprehensive alternative to the regular high school program for 11th and 12th graders, offering credits which fulfill all requirements for graduation. In comparison to students in the regular program, students in the project are expected to:

1) Achieve a higher level of knowledge and understanding of relationships between their academic, career, and interpersonal skills and their ultimate success in careers.
2) Develop in basic academic skills areas.
3) Have a significantly lower dropout rate.
4) Develop a more positive self-concept and view learning more positively.

PROCEDURES

Jackson County Intermediate Education District will replicate the Experience-Based Career Education program in Tigard, Oregon. The program will serve all eight secondary schools in Jackson County (150 of the 736 11th and 12th graders during the 3-year period) using a facility located in a downtown shopping center office building. Special individual learning programs will be designed, developing and utilizing vocational training sites within the business community and public sector, so that experiential learning will occur through interaction of students and adults in a normal working environment. A third-party evaluation will focus on cost benefits and student academic and vocational progress.

EXPECTED CONTRIBUTION TO EDUCATION

1) Anticipated end products are a model learning center, non-sex stereotyped methods and materials, learning sites, community support for education, and evaluation information.
2) The long range expected result is an increase in the level of youth employment and broadening of occupational aspirations through broader exposure to career options.

APPLICATION NUMBER: 502AH60025 GRANT NUMBER: J037600225

PROJECT TITLE: Experience-Based Career Education in Harrisburg

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Gerald Steger, Associate Director, Secondary Education
Harrisburg School District
P. O. Box 2645
1201 North 6th Street
Harrisburg, Pennsylvania 17105

FUNDING PERIOD: September 1, 1976 - August 31, 1979

OBJECTIVES

1) Reduce the continuing high level of youth unemployment.
2) Create a bridge between school and earning a living.
3) Broaden occupational aspirations and opportunities for young people, emphasizing services for the handicapped.
4) Foster more productive cooperation among the school district, the community at large, the business and industrial communities, and the Pennsylvania State Department of Education.

PROCEDURES

Based on the Experience-Based Career Education (EBCE) model designed and developed at the Appalachia Educational Laboratory, the District will provide high school juniors and seniors academic credit for successful completion of an alternative high school program that includes individualized career exploration experiences of 1 to 13 weeks each at three or more job sites in the community. Job site experience at one of four levels (observation, hands-on with no prerequisite skills, hands-on with prerequisites, and instruction) will be integrated with curriculum content of the academic subjects for developing career decisionmaking, academic, and job-related skills along with those needed for family, community, and political roles. After the first phase of planning, staff training, experience site analysis, and student recruitment, 40 students will be involved in the program at Harrisburg High School in the first year and 120 in the second year. Educational Research and Development Associates will be the third-party evaluator.

EXPECTED CONTRIBUTION TO EDUCATION

By the third year the program will be functioning as a demonstration site with the Pennsylvania State Department of Education performing most of the outreach and dissemination activities for creating a statewide network of 15 EBCE district programs by 1980.

APPLICATION NUMBER: 502AH60077 GRANT NUMBER: J037600230

PROJECT TITLE: Building Experience-Based Career Education

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Stanley B. Cohen
School District of Philadelphia
Division of Career Education
734 Schulykill Avenue
Philadelphia, Pennsylvania 19176 (215) 299-7823

FUNDING PERIOD: September 1, 1976 - August 31, 1979

OBJECTIVES

1) Make career education, as well as related academic and life skills, available to every secondary student.
2) Demonstrate the adaptability of three Experience-Based Career Education (EBCE) models (as developed by the Far West Regional Educational Laboratory, the Northwest Regional Educational Laboratory, and Research for Better Schools) to the needs of the students of the School District of Philadelphia.

PROCEDURES

Three demonstration programs will be developed from these models, a different program in each of three comprehensive, inner-city schools. At the outset, the program will involve 360 students (120 per school) with yearly increases projected both within and beyond the course of this project. Each laboratory will provide the staff development and supportive services necessary to implement the single program for which it is responsible. These include staff development, resource recruitment, instructional strategies and materials, and evaluation. A computerized management system will be utilized to coordinate the resources of the business and industrial community with individual student needs for career exploration. Each participating student will 1) receive credit toward a standard high school diploma by successful completion of career education projects within the community; 2) be actively involved with adults within their normal working environments; and 3) proceed through an individualized learning plan based upon education requirements, individual aspirations, and career goals.

EXPECTED CONTRIBUTION TO EDUCATION

A central staff training capability will be created for the implementation of additional programs involving all 23 comprehensive high schools in Philadelphia over a 7-year period.

APPLICATION NUMBER: 502AH60050 GRANT NUMBER: G047603004

PROJECT TITLE: Experience-Based Career Education

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
J. F. Hall, Superintendent
School District of Greenville County
301 Chaperdown Way
Greenville, South Carolina 29611 (803) 242-6450

FUNDING PERIOD: September 1, 1976 - August 31, 1979

OBJECTIVES

1) Increase student achievement in basic skills and in knowledge of careers, and improve attitudes toward learning environments and toward self.
2) Develop lines of communication between Mann High School and business communities, agencies, and other community resources.
3) Develop career education curriculum for each of several clusters of occupations.

PROCEDURES

J. L. Mann High School will be the site for implementing the Research for Better Schools Experience-Based Career Education (EBCE) model, which has three components: career development, career guidance, and academic resource center (individualized instruction in English, economics, and mathematics). The first semester will be devoted to recruitment and analysis of community clusters; inservice training of teachers, counselors, and onsite supervisors; selection and scheduling of students (36 10th and 11th graders); and curriculum development for community sites and for the academic resource center. Students will spend two half days in exploratory experiences onsite and the remainder of those days in required or elected courses. On the other three days they will be in the EBCE resource classroom for two hours of individualized instruction in English, economics, and math. Each student will be assigned to a group guidance period twice a week and an individual counseling conference every four weeks. During the second year 72 students will participate in the program, 100 students during the third year.

EXPECTED CONTRIBUTION TO EDUCATION

Program results will be disseminated to other schools in Greenville County and to the South Carolina Department of Education.

APPLICATION NUMBER: 502AH60020 GRANT NUMBER: G617600967

PROJECT TITLE: San Antonio Experience-Based Career Education Project

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Bill R. Lafferty
Education Service Center, Region 20
1550 NE Loop 410
San Antonio, Texas 78209 (512) 828-3551

FUNDING PERIOD: September 1, 1976 - August 31, 1979

OBJECTIVES

1) Demonstration of an Experience-Based Career Education (EBCE) program in the bicultural Southwest.
2) Increased student development of basic academic skills, life skills, personal and functional competencies, and career development.
3) Development of closer educational ties between the community employer sites and the formal educational institutions of the community.

PROCEDURES

The Education Service Center will coordinate the efforts of two San Antonio school districts (Harlandale and South San Antonio), various community resources, the Northwest Regional Educational Laboratory (which developed the program model), and Research for Better Schools (which will conduct the third-party evaluation). Students will be selected from four participating high schools: 40 in the first year, 80 in the second, and 120 in the third. Working from an individualized learning plan developed with his learning manager, each student will earn diploma credits by 1) completing 10 life skills learning projects and 5 career explorations (2 to 3 weeks each); 2) being certified in 12 functional competencies; 3) visiting 10 career awareness community sites (business, industry, government, military, professional, arts, services, etc.); and 4) demonstrating basic academic skills. Each district will maintain a learning center for student and staff headquarters but will share the same community resource sites and employer-instructors.

EXPECTED CONTRIBUTION TO EDUCATION

The Education Service Center will coordinate dissemination activities for extending the EBCE model to other school districts throughout the State of Texas.

APPLICATION NUMBER: 502AH60105 GRANT NUMBER: G087600115

PROJECT TITLE: Experience-Based Career Education Project

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Thera Johnson, Career Education Specialist
Weber County School District
Vocational Education
1122 Washington Boulevard
Ogden, Utah 84404 (801) 394-8873

FUNDING PERIOD: September 1, 1976 - August 31, 1979

OBJECTIVES

The program goal is to provide for significant and continuing improvement in the career development and experiential learning opportunities of high school students in areas of career information, decisionmaking skills, and academic proficiency at a feasible cost to the public.

PROCEDURES

Research for Better Schools educational laboratory will be contracted to supply program planning assistance and materials and support services, including staff training workshops and technical assistance for evaluation and dissemination of the Experience-Based Career Education (EBCE) project. The program will center in two school districts and be implemented in four high schools with 60 students participating in the first year, 325 by the third and 475 by the fifth. In the Career Development Component, shared by the two districts, personnel and facilities outside the school will be utilized in the development and operation of programs which include 1) a series of career exploration minicourses held at community resource sites, each organized around related career areas and including group and individual activities; and 2) independent study projects for further exploration or skill development in a particular career area. Each high school will implement onsite the Academic Resource Center Component (involving individualized instruction in English and mathematics) and the Career Guidance Component, which provides for student career development through a program of group guidance instruction.

EXPECTED CONTRIBUTION TO EDUCATION

The program will be an exemplary EBCE project in the State of Utah, serving as a demonstration model which may be replicated in other geographic locations in the State.

APPLICATION NUMBER: 502AH60017 GRANT NUMBER: J037600227

PROJECT TITLE: Prince William County Experience-Based Career Education Project

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
J. Earle Phillips, Jr.
Associate Superintendent for Instruction
Prince William County Schools
P. O. Box 389
Manassas, Virginia 22110

FUNDING PERIOD: September 1, 1976 - August 31, 1979

OBJECTIVES

1) Adapt and implement Experience-Based Career Education (EBCE) Community Experiences for Career Education following closely the model in operation in Tigard, Oregon.
2) Develop in program students an increased sense of personal worth and self-confidence in integrating knowledge of a variety of careers with the acquisition of cognitive, interpersonal, and effective skills through participation in a series of planned school and community experiences with identified outcomes.

PROCEDURES

Students from two high schools will be involved at two learning resource sites in the County in an instructional program with three components; basic skills, life skills, and career explorations. Approximately 50 percent of the student's time will be spent using community resources for career explorations and certification in such competencies as using credit, balancing bank accounts, etc. Learning is implemented through student projects, exchange of a student journal with the instructor, individualized materials in basic skills, and observation and training at job sites. During the first semester, staff will be selected and trained and will organize instructional materials, develop the school learning center, recruit students, and develop employer sites and other community resources. An advisory council will be created to suggest and review procedures, and Research for Better Schools will conduct a third-party evaluation. A total of 120 students will be involved by the third year.

EXPECTED CONTRIBUTION TO EDUCATION

The project will provide a distinctively new program that will substantially bridge the education/career gap and provide a viable alternative to students who are not benefiting from existing programs.

APPLICATION NUMBER: 502AH60119 GRANT NUMBER: J037600228

PROJECT TITLE: An Experience-Based Career Education Program

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Charles G. Moore
Vocational, Technical and Adult Education
Cabell County Board of Education
620 20th Street
Huntington, West Virginia 25701 (304) 626-7871

FUNDING PERIOD: October 1, 1976 - September 30, 1979

OBJECTIVES

The primary purpose of the project is to demonstrate Experience-Based Career Education (EBCE) as an alternative school program for 10th grade students based on the model developed by the Appalachia Educational Laboratory (AEL). Objectives focus on experiential learning in the community, individualized instruction and learning, and integrated learning of academic, career, and life role skills to bridge the gap between school and work.

PROCEDURES

Employers, the community, and manpower agencies will have an integral part in planning and conducting the program. Operative and consultative assistance will be provided by a local advisory committee, AEL personnel, the West Virginia State Bureau of Vocational, Technical and Adult Education, and a third-party evaluator. Twenty participants and alternates will be selected from a list of potential students at four high schools in the County. Instead of attending the regular high school program they will 1) survey job sites in the community, 2) choose the places and jobs of interest to them, and 3) spend a period of time working at many job sites of their career preference. By working with the student on an individual basis, specially trained teachers will turn job experiences into academic experiences, and these into earned high school credits. In the second and third years, 50 work experience sites, 20 students, and a learning coordinator will be added each year.

EXPECTED CONTRIBUTION TO EDUCATION

Results of the project will demonstrate to other school districts that the AEL version of EBCE is transportable and is a viable alternative educational program. Interaction of the program with the community will foster a more positive relationship between the schools and industry.

APPLICATION NUMBER: 502AH60042 GRANT NUMBER: G057600213

PROJECT TITLE: Demonstration of NIE's Experience-Based Career Education Program

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Kurt R. Thiel, Principal
Goodrich Senior High School
Fond du Lac School District
72 South Portland Street
Fond du Lac, Wisconsin 54935

FUNDING PERIOD: September 1, 1976 - August 31, 1979

OBJECTIVES

The purpose of the project is to demonstrate an exemplary program in vocational education based on the Appalachia Educational Laboratory (AEL) model for Experience-Based Career Education (EBCE), an alternative secondary school program combining academic learning with career preparation for high school juniors and seniors.

PROCEDURES

About 60 students will be involved in an individualized learning program involving first-hand experiences in places where people are employed to produce goods and services. Students will perform nonpaying work tasks as well as observe adults in their work environment. Activities in the work place, four days a week, will be organized jointly by the student and a learning coordinator during the fifth day to yield academic, career, interpersonal, and occupational skills. A variety of work styles will be selected to provide exploration experiences in many career fields. An organization structure composed of school and community representatives will render advisory assistance, and the staff will receive training at AEL and use materials and procedures included in the model to develop and implement the program. The Center for Vocational, Technical, and Adult Education at the University of Wisconsin will conduct a third-party evaluation.

EXPECTED CONTRIBUTION TO EDUCATION

After the first year the Fond du Lac project staff will provide demonstration/training/technical assistance to high schools in the North Central States who plan to use the EBCE instructional delivery system.

APPLICATION NUMBER: 502AH60063 GRANT NUMBER: G087600116

PROJECT TITLE: Planning for Change Through Career Education

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Michael J. Elliott, Career Education Director
Wyoming State Department of Education
Division of Instructional Services
Hathaway Building
Cheyenne, Wyoming 82002

FUNDING PERIOD: August 16, 1976 - August 15, 1979

OBJECTIVES

The purpose of the project is to provide local education agencies (LEAs) with the means, resources, and processes for effective incremental improvement of their ongoing career education efforts with the adoption/adaption of the National Institute of Education's Experience-Based Career Education (EBCE) model.

PROCEDURES

The Wyoming State Department of Education will:

1) Provide assistance to four LEAs in the final preparation of individual management tasks for the first-year implementation plan.
2) Provide assistance to the four LEAs in the development of their own unique delivery systems (processes, techniques, materials) for implementing and sustaining EBCE.
3) Determine the appropriate EBCE incremental staff implementation needs of the four LEAs through a continuous process of staff individual needs assessment and monitoring.
4) Provide other agencies with information about dissemination services available from the State Department regarding EBCE demonstration sites in cooperation with the University of Wyoming and Project WINS (Wyoming Innovative Network Schools).
5) Utilize evaluation procedures that generate data necessary to provide corrective feedback to key components of the State assistance process.

EXPECTED CONTRIBUTION TO EDUCATION

Successful aspects of the EBCE project will be systematically disseminated and will be integrated into all existing state plans and state curricula areas.

PART D: DEMONSTRATION

Priority: Cluster Projects

APPLICATION NUMBER: 502AH60088 GRANT NUMBER. G107600075

PROJECT TITLE: Occupational Cluster/Experience Project

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
J. M. Gilman, Administrative Assistant
Cordova Public Schools
P. O. Box 140
Cordova, Alaska 99574

FUNDING PERIOD: August 1, 1976 - July 30, 1979

OBJECTIVES

The purpose of the project is to increase the effectiveness of the existing Cordova Junior High School program through:

1) Expansion of curriculum flexibility which will permit the focus of educational experiences on a wide variety of careers.
2) Integration of academic experiences and onsite career exploration.
3) Change in the role of community employers from supervisor/employers to learning guides or teachers.

PROCEDURES

The Northwest Regional Educational Laboratory's Experience-Based Career Education (EBCE) materials and techniques will be used to incorporate a career educational occupational cluster approach at the seventh and eighth grade levels. The Northwest Regional Education Laboratory will be contracted to provide technical assistance, staff inservice training, and employer training. Five to ten occupational clusters, each including occupational ladders from manual labor through technical and professional levels, will be selected for the first year's program by the community advisory committee and the staff. Individual learning plans for the 20 students will encompass counseling, cluster exploration, and learning site investigation. A third party evaluation will be conducted by a research laboratory.

EXPECTED CONTRIBUTION TO EDUCATION

A total EBCE program in Grades 7-12 will be phased in after a 3- or 4-year period. Descriptive and evaluative information will be provided to other districts and interested parties.

APPLICATION NUMBER: 502AH60104 GRANT NUMBER: G097600178

PROJECT TITLE: The Tucson Experience-Based Career Education Program

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Thomas L. Lee
Tucson High School District No. One
P. O. Box 4040
1010 East Tenth Street
Tucson, Arizona 85717 (606) 791-6129

FUNDING PERIOD: July 1, 1976 - June 30, 1979

OBJECTIVES

The purpose of the project is the further development, expansion, and dissemination of the District's career education programs through the operation of a career education center which provides for the direct involvement of 300 juniors and seniors and serves as a demonstration program for the District's nine high schools. Objectives are to improve students' attitudes, skills, and knowledge in a number of career areas.

PROCEDURES

Relationships between career clusters and conventional subject areas will be identified, developed, and maintained to facilitate integration of career education concepts into the traditional high school program. Selected aspects of the Experience-Based Career Education (EBCE) model will also be integrated with the in-school, cluster-based curriculum. Developed with the technical assistance of the Northwest Regional Educational Laboratory, the community-based component will include 1) the recruitment, orientation, and training of area employers who will supervise students in career exploration experiences at community work sites and 2) assignment of each student to an EBCE teacher who advises and supervises him in the development of an individualized learning plan of four 9-week explorations (two or three visits a week). Student placement and followup activities will include assistance in job placement or postsecondary program admission. Third-party evaluation of the program will focus on both processes and products (student outcomes).

EXPECTED CONTRIBUTION TO EDUCATION

The methods and techniques developed for EBCE and cluster-based instruction will be defined and disseminated to the District's other high school, to nonprofit private and parochial schools, and to other interested districts in Arizona and throughout the country.

APPLICATION NUMBER: 502AH60094 GRANT NUMBER: G617600966

PROJECT TITLE: A Team Approach to Develop and Implement an In-School Cluster Structure Designed for Occupational Exploration and Initial Job Preparation

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
James Dasher, Specialist, Exemplary Programs
Arkansas State Department of Education
Division of Vocational, Technical and Adult Education
State Office Building
Little Rock, Arkansas 72201 (501) 371-1561

FUNDING PERIOD: October 1, 1976 - September 30, 1979

OBJECTIVES

The purpose of the project is the further development and demonstration of the instructional strategies, methods, and techniques of Experience-Based Career Education (EBCE) in coordination with an in-school occupational cluster design. It will give participating high school students the opportunity for occupational exploration and initial job preparation at a variety of community sites.

PROCEDURES

The Arkansas State Education Agency will cooperate with a State post-secondary vocational-technical school and three local education agencies to implement an EBCE program in the three school districts. The Northwest Regional Laboratory will serve as a consultant in utilizing site analysis techniques, employer orientation and recruitment techniques, and individual student learning plans with behaviorally stated objectives. Each school will use a five-member team to staff its project: 1) a school community coordinator, who will be the local project director, 2) a high school counselor, who will be involved in development of a media center as well as individual and group counseling, 3) a career orientation teacher, who will offer a course of occupational information on career clusters, 4) an exploratory teacher, who will develop elective 6-week minicourses of 1 hour per week and individualized learning plans for career exploration in the community, and 5) the general cooperative teacher, who will arrange skill development work experiences in a student's chosen field.

EXPECTED CONTRIBUTION TO EDUCATION

Adaptation of the various EBCE techniques will provide a model for all cooperative programs in Arkansas.

APPLICATION NUMBER: 502AH60069 GRANT NUMBER: G087600113

PROJECT TITLE: Career Education: Planning, Learning, Understanding, Succeeding

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Jerry Tuchscherer, Career Education Specialist
North Dakota State Board for Vocational Education
900 East Boulevard
Bismarck, North Dakota 58505

FUNDING PERIOD: July 1, 1976 - June 30, 1979

OBJECTIVES

1) Enhance students' self-development, civic responsibility, and economic awareness.
2) Help bridge the gap between school and earning a living and provide more occupational opportunities for growth, in order to reduce the level of youth unemployment.
3) Acquaint students with occupational choices in their community along with the education needed to take advantage of those choices.

PROCEDURES

An in-school cluster system of career education will be integrated into an Experience-Based Career Education (EBCE) plan permitting students the option of having a combination of in-school learning opportunities about the broader community environment and the option to cycle out into that environment for short periods of time for exploration and career skill development activities. For the latter (initially, about 30 students), learning strategies include 1) career explorations (3- to 5-day student encounters with the people and job tasks related to occupations that interest them at community sites); 2) individualized, problem-centered projects to help blend learning objectives from the Life Skills, Basic Skills, and Career Development curriculum areas in activities performed largely at community sites of their choice; and 3) opportunities to return for longer and more in-depth exploration and skill development at workplaces in the community. Administrative tasks include development and utilization of community and employer site resources and training of employers as supporting staff for the program. A third-party evaluation is also included in the administrative plan.

EXPECTED CONTRIBUTION TO EDUCATION

The final product will be a workable plan for implementation of similar programs statewide in districts of various sizes. The plan would be disseminated by state staff.

APPLICATION NUMBER: 502AH60027 GRANT NUMBER: G310760052

PROJECT TITLE: Experience-Based Career Education

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Frank M. Santoro, Deputy Assistant Commissioner
Rhode Island Department of Education
Bureau of Vocational Education
Roger Williams Building
22 Hayes Street, Room 301
Providence, Rhode Island 02908

FUNDING PERIOD: September 1, 1976 - August 31, 1979

OBJECTIVES

The purpose of the project is to give high school students who have not yet made career decisions the opportunity to explore a wide range of jobs, job environments, and job responsibilities while completing required academic work. Objectives for student participation in the program are increased career skills in both cognitive and affective domains, increased self awareness skills, and more relevant basic skill development.

PROCEDURES

Based on the Experience-Based Career Education (EBCE) model developed by Research for Better Schools (RBS), the program will be conducted out of two of the State's area vocational facilities. Nine sending communities encompassed in the areas served by the two facilities will participate. During the first year two teachers and two counselors from each of the sending high schools, along with two resource coordinators and two curriculum developers hired by the program, will be trained by RBS in how to implement the model. Each sending high school will operate the career guidance and academic components at their own site, and the community-based career development component will operate out of the area facilities. Staff will be trained to develop employer job sites for student learning experiences and to integrate academic and counseling components with those experiences. The 150 juniors involved in the first year will be doubled in the second year with 300 juniors and seniors served in the third year and thereafter.

EXPECTED CONTRIBUTION TO EDUCATION

Participating schools will be prepared to provide EBCE instruction to other staff members. Positive outcomes will be replicated in other Rhode Island areas.

APPLICATION NUMBER: 502AH60061 GRANT NUMBER: G087600114

PROJECT TITLE: Pathfinder: Exploration Through a Cluster Structure Linking Business, Industry, Manpower Agencies, and Vocational-Technical Education by Broadening Information, Aspirations, and Career and Educational Opportunities for Young People

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Clayton Carlson
Watertown Independent School District No. 1
200 Ninth Street Northeast
Watertown, South Dakota 57201

FUNDING PERIOD: October 1, 1976 - September 30, 1979

OBJECTIVES

1) Provide community-based career experiences to young people who have left high school either by graduation or by dropping out and who wish to explore careers through onsite/community experiences designed to facilitate their decisions to enter education or training programs, or specific work situations.
2) Help the community and the schools become partners in meeting individual student needs.

PROCEDURES

Sixty students will be involved in a project which resembles the Community Experience in Career Education program of Experience-Based Career Education (EBCE) in Tigard, Oregon. Site recruitment materials and techniques developed by the Northwest Regional Educational Laboratory will be used to arrange working relationships with area employers and provide them with staff support, program information, skill development, and contact with each other needed to guide, negotiate with, instruct, and evaluate students. Individualized student learning plans will be negotiated between students, staff, and employer instructors. Students will spend 15 to 20 hours a week exploring careers on job sites, learning about occupations within a cluster framework while refining career selection skills. Individual programs for improving basic academic skills will be coordinated with job site experiences. Students who wish to further develop employable skills in a particular job may arrange for special placement with an employer.

EXPECTED CONTRIBUTION TO EDUCATION

A wholly or partially transportable EBCE model will be available for the use and participation of other vocational-technical schools or by private nonprofit schools.

APPLICATION NUMBER: 502AH60086 GRANT NUMBER: G107600073

PROJECT TITLE: Highline District's Vocational Exploratory and Preparatory Program

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Ben A. Yormark, Director of Career Development
Highline Public Schools
Instructional Division - Career Development
15675 Ambaum Blvd. SW
Seattle, Washington 98166

FUNDING PERIOD: September 1, 1976 - August 31, 1979

OBJECTIVES

The project will be directed toward improvement of the vocational education program at the senior high level by 1) bridging the gap between vocational education and the world of work; 2) bridging the gap between vocational guidance and vocational training; 3) improving the placement rate of graduates of vocational programs; and 4) meeting the needs of individual students.

PROCEDURES

When the program is in full operation, 300 students will be involved in a vocational exploration and preparation program representing a major adaptation of the Experience-Based Career Education (EBCE) learning strategies developed by the Northwest Regional Educational Laboratory. These will be incorporated into a school-based cluster arrangement which allows students opportunities to 1) examine their own interests and abilities as they relate to employment opportunities; 2) explore the variety of career opportunities available to them; and 3) become involved in preparatory experiences which will qualify them for these employment opportunities. Administrative procedures will focus on development of business-industry linkages; inservice orientation of project staff and community representatives; student recruitment, records, health and safety, and placement and followup; special needs affirmative action; budgetary control; facilities; transportation; community relations; dissemination; and third-party evaluation.

EXPECTED CONTRIBUTIONS TO EDUCATION

Management procedures and instructional materials developed will enable school administrators in other districts to initiate similar programs, and instructional programs implemented through this project shall become an integral part of the vocational education program within the Highline School District.

PART D: DEMONSTRATION

Priority: Work Experience and Cooperative Vocational Education

APPLICATION NUMBER: 502AH60067 GRANT NUMBER: G087600111

PROJECT TITLE: Colorado Experience-Based Career Education Model (7-10)

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Bill Barnes, Supervisor, Career Education
Colorado State Board of Community Colleges and
Occupational Education
207 State Services Building
1525 Sherman Street
Denver, Colorado 80203 (303) 892-3071

FUNDING PERIOD: September 1, 1976 - August 31, 1979

OBJECTIVES

The project objective is to produce a career exploration model for utilization by schools in Colorado. The components and strategies of the model will contain the necessary inservice programs, implementation plans, evaluation procedures, and other pertinent information for each strategy.

PROCEDURES

Based on the Experience-Based Career Education (EBCE) programs of the Northwest Regional Educational Laboratory and Research for Better Schools, an exploratory model will be pilot tested and field tested in each of four participating sites. The four sites, representative of the schools in Colorado, are in a high plains farming community, a rural isolated mountain community, a predominantly Mexican American community, and an urban area. The focus of the first year will be to define the major components of the Colorado model, to select appropriate strategies, and to pilot test selected strategies in each of the four schools. The second and third years will include field testing and demonstration of the model at the four sites. Coordinated at the State level, the project will have a state-level project director and a local coordinator employed by each participating school district. Each site will have a district advisory committee, and representatives from the participating schools will form a project steering committee for the development of the model.

EXPECTED CONTRIBUTION TO EDUCATION

1) A Colorado model for career exploration, including program components and strategies.
2) Validated implementation plans for four school districts of varying characteristics to guide adoption and adaptation of the model by other school districts.

APPLICATION NUMBER: 502AH60001 GRANT NUMBER: G057600217

PROJECT TITLE: Expand and Improve the Instructional Strategies, Methods, and Techniques of Research for Better Schools (RBS) Experienced-Based Career Education Program with a Currently Existing K-12 Career Education Program

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
James E. Williams, Instructional Assistant, Career Education
New Albany-Floyd County Consolidated School Corporation
802 East Market Street
New Albany, Indiana 47150

FUNDING PERIOD: September 17, 1976 - September 16, 1979

OBJECTIVES

The purpose of the project is to facilitate improved career decisionmaking capabilities by expanding student personal, occupational, and curricular awareness and thereby provide students with the knowledge and reality-based experience to make rational decisions related to academic and career plans.

PROCEDURES

The project will adapt the materials and knowhow of the Research for Better Schools (RBS) Experience-Based Career Education (EBCE) program to improve the local K-12 career education plan focusing on development of a system-wide EBCE program designed as an elective available to all sophomores, juniors, and seniors in the district. Tasks include 1) realignment and expansion of the established Career Resource Center and its staff responsiblities; 2) orientation and inservice training for career center staff, teachers, administrators, and participating community resource site personnel; 3) screening and selection of specific community resource sites; 4) development of uniform student exploration-investigation procedures and requirements; and 5) establishment of specific onsite inquiry experiences for each community resource facility. Students will explore and investigate career cluster resource sites in the community on an extended first-hand basis. During the 10th and 11th grades they may participate in three 1-week resource explorations; during the 12th grade they may take part in one personalized career investigation experience one day a week for nine consecutive weeks. New Educational Directions, Inc., will conduct a third-party evaluation of the program.

EXPECTED CONTRIBUTION TO EDUCATION

The Consolidated School Corporation will disseminate career education information products to all interested school corporations throughout the State of Indiana. Local education agencies will be given packets during inservice workshops and/or during career education sharing conferences.

APPLICATION NUMBER: 502AH60059 GRANT NUMBER: G047603003

PROJECT TITLE: Experience-Based Career Education

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Donald J. Hanratty
Itawamba Community Junior College
P. O. Drawer 1588
Tupelo, Mississippi 38801

FUNDING PERIOD: September 1, 1976 - August 31, 1979

OBJECTIVES

Objectives are to provide an individualized developmental studies program for educationally disadvantaged students which will include development of reading comprehension and mathematical skills along with career exploration experiences in a nontraditional setting. The project will expand the existing cooperative education program, permitting student exposure to a minimum of three diverse work environments.

PROCEDURES

Selected components of the Appalachia Educational Laboratory's (AEL) Experience-Based Career Education (EBCE) model will be used to provide an individualized 15-week course for high school dropouts and graduates. AEL methods to be used are learning site analysis, individualized student learning packages with behaviorally stated objectives, and employer recruitment strategies. A 2-week student orientation will include testing, occupational information, and selection by each student of at least three occupations to explore during the 12-week onsite experience phase. Four days of each week will be spent onsite; the fifth day will be spent on campus for planning and review with the learning coordinator and for study and research in the resource center. During the 1-week wrap-up and evaluation sessions students may choose to enter further training or receive job placement assistance. A third-party evaluation will be contracted.

EXPECTED CONTRIBUTION TO EDUCATION

Various means of dissemination will be utilized to publicize the program strategies and outcomes throughout the State of Mississippi in the hope that positive elements will be incorporated into other vocational education programs on the secondary and postsecondary levels.

APPLICATION NUMBER: 502AH60053 GRANT NUMBER: G087600112

PROJECT TITLE: Experience-Based Career Education: Vocational and Career Education - A Model for Expansion and Improvement

PRINCIPAL INVESTIGATOR AND ORGANIZATION:

Frances Jackson, Director of Career Education
Great Falls Public Schools
1100 Fourth Street South
Great Falls, Montana 59403 (406) 761-5800

OBJECTIVES

1) Identify, develop, and/or implement career programs which are based upon manpower needs and student career interests.
2) Implement an up-to-date guidance program.
3) Develop a placement system including both information and services.
4) Improve existing programs and student performance in basic skills and specified areas of career development.

PROCEDURES

Selected elements of the Northwest Regional Educational Laboratory's Experience-Based Career Education (EBCE) model will be utilized to develop new programs in cooperative vocational education and work experience and to improve the existing experiential program in the district. Both the developmental and improvement efforts will rely heavily upon the techniques employed for the recruitment and training of persons in the business/industry/labor community to serve as community models and instructors for young people. Emphasis is on individualized instruction including the basic skills of mathematics and language arts. Processes for student career development have been identified as self-awareness, career awareness, career exploration, career preparation, and placement in either work or further training and education. Program components include career-related in-school experience, work and out-of-school experience, supervision in a work environment, and participation in a productive economic role. Placement procedures will be developed with the collaboration of manpower personnel and other agencies having a placement function.

EXPECTED CONTRIBUTIONS TO EDUCATION

Dissemination products will include curriculum guides, a bibliography on bias-free career guidance materials, audiovisual materials, and procedural manuals.

APPLICATION NUMBER: 502AH60010 GRANT NUMBER: G617600968

PROJECT TITLE: Experience-Based Career Education in Cooperative Vocational Education and Work Experience

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Sam W. Kerr, Coordinator of Career Education
Moore-Norman Area Vocational-Technical School
4701 Northwest 12th Avenue
Norman, Oklahoma 73069

FUNDING PERIOD: September 1, 1976 - August 31, 1979

OBJECTIVES

1) Create bridges between school and earning a living for young people who are still in school, who have left school by graduating or dropping out, or who are in postsecondary programs of vocational education.
2) Broaden occupational aspirations and opportunities for youths with special emphasis on those who have academic, socioeconomic, and other handicaps.
3) Reduce youth unemployment.
4) Reduce the dropout rate of secondary students.
5) Promote cooperation between public education and manpower agencies.

PROCEDURES

Strategies developed by the Appalachia Educational Laboratory (AEL) for Experience-Based Career Education (EBCE) will be used to develop and implement a program in which students will earn credit for onsite career exploration in various occupational areas. Initially, staff trained by AEL will obtain parent and community involvement, recruit and enroll students, and identify and analyze job experience sites in the community. Eleventh and twelfth grade students will be involved in career exploration experiences both at a job site and with the learning coordinator a minimum average of 15 hours per week. AEL strategies to be used include site analysis techniques, employer orientation and recruitment techniques, and individual student learning plans with behaviorally-stated objectives for student experience-based exploration and cooperative education. A third-party evaluation will be conducted by an Oklahoma teacher training institution. Once in full operation, the program will serve about 150 students per year.

EXPECTED CONTRIBUTION TO EDUCATION

Groundwork will be laid to network and institutionalize the EBCE program throughout the State.

APPLICATION NUMBER: 502AH60103 GRANT NUMBER: G047603005

PROJECT TITLE: Demonstration of Experience-Based Career Education in Memphis, Tennessee

PRINCIPAL INVESTIGATOR AND ORGANIZATION:

Daniel H. Campbell
Memphis City Schools
Division of Vocational Education
2597 Avery Street
Memphis, Tennessee 38112

FUNDING PERIOD: September 1, 1976 - August 31, 1979

OBJECTIVES

The purpose of the project is to provide students with expanded onsite opportunities to explore various related career areas before they select a career specialization area of training. Specific objectives are to 1) provide a total educational system, preparing students either for placement in immediate employment or further education and 2) help create student awareness of the relationship between careers and the other correlated subjects in the school curriculum.

PROCEDURES

Site analysis techniques, employer orientation and recruitment techniques, and the individual student learning plans of the Research for Better Schools Experience-Based Career Education (EBCE) program will be implemented at Hamilton High School where 120 students will be directly involved each year. Program components include 1) Career Development Orientation in which 10th graders select from 15 occupational clusters those which they want to explore in once-a-week, 5-hour sessions which allow for involvement with participating community resources; 2) Career Experience Component in which 11th and 12th graders receive specialization experiences and/or job training in a cooperative work experience program in a local business; and 3) Career Placement Component which includes integration of career information and job readiness material into the regular curriculum and placement of vocational seniors in areas of their training. The project will expand and modify existing cooperative education programs so they can better meet the needs of the students and the community.

EXPECTED CONTRIBUTION TO EDUCATION

This implementation and demonstration of EBCE will be a prototype or model for other school systems.

APPLICATION NUMBER: 502AH60111 GRANT NUMBER: G097600180

PROJECT TITLE: Exemplary Demonstration Project in Cooperative Education

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Harold Luntey, President
American Samoa Community College
P. O. Box 2609
Pago Pago, American Samoa 96799

FUNDING PERIOD: September 1, 1976 - August 31, 1979

OBJECTIVES

1) Provide opportunity for secondary and postsecondary students in the Territory of American Samoa to have on-the-job experiences in a work setting.
2) Provide instruction relating to saleable skills through cooperative arrangement between the College and local employers.

PROCEDURES

Job stations will be identified in the private and government sectors where students will work part-time in areas of their educational major. Agreements between the employers and the American Samoa Community College will be signed to assure that the students will receive occupational training related to their school. The cooperative education coordinator will make periodic visits to the employers to evaluate the students' performance. Grades will be determined by the reports given by the supervisors at the training stations. The program coordinator will be responsible for conducting an evaluation and reporting procedures. About 150 students will be involved in the program over the 3-year period.

EXPECTED CONTRIBUTION TO EDUCATION

Changes in the curriculum content at the secondary and postsecondary levels will be made to reflect current job needs and requirements.

APPLICATION NUMBER: 502AH60089 GRANT NUMBER: G097600181

PROJECT TITLE: Community-Based Building Maintenance Mechanics Training

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Michael L. Rask, Associate Superintendent
Government of Guam Department of Education
Division of Career & Occupational Education
P. O. Box DE
Agana, Guam 96910

FUNDING PERIOD: July 1, 1976 - June 30, 1979

OBJECTIVES

1) Provide students enrolled in the newly implemented Building Maintenance Mechanics Program (BMMP) with adequate experiences relating to commercial structure maintenance so that, upon the completion of the 2-year course of study (in-class and community-based), they will be able to transfer smoothly into the Cooperative Work Experience Program for completion of their training.
2) Test the feasibility of providing mobility for vocational programs so that students can experience the diversity of building maintenance in a realistic setting.

PROCEDURES

A project serving 48 secondary school juniors in the BMMP will be developed and conducted utilizing as training sites various Government of Guam agencies whose facilities represent most structural models. Arrangment will be made with businesses on Guam to utilize their buildings on a limited basis when they have a unique maintenance component. The program will be assisted by a community advisory committee under the direction of the administration of Guam Vocational-Technical High School. A third-party evaluation will be conducted.

EXPECTED CONTRIBUTION TO EDUCATION

1) An evaluation of the effectiveness of basing vocational education, prior to paid work experience, on a combined classroom and community program.
2) A model for other Pacific Basic Educational Systems which are interested in implementing a BMMP relevant to their particular construction materials and techniques.

PART D: DEMONSTRATION

1974 Priority: K-14 Career Education (Continuations)

APPLICATION NUMBER: F4007VW GRANT NUMBER: 4745200

PROJECT TITLE: A Comprehensive Program of Vocational Education for Career Development: K-University

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
C. Virginia Bert
Bureau of Research and Evaluation
Division of Vocational Education
Florida Department of Education
Room 258 Knott Building
Tallahassee, Florida 32304 (904) 488-7591

FUNDING PERIOD: July 1, 1974 - June 30, 1977

OBJECTIVES

The purpose of the project is to develop a highly articulated K-University comprehensive educational program focused on career opportunities and requirements for job entrance and advancement. Career development experiences will serve as the vehicle for teaching basic academic skills to youth.

PROCEDURES

A model program and delivery system will be developed to assist district schools, community/junior colleges, and universities in providing coordinated career education programs for their students. Two contiguous school districts of elementary, middle, junior and senior high schools, area vocational technical schools, a junior college, and a state university (16 institutions serving over 25,000 students) will provide the articulated career education program. Students in grades K-6 will become familiar with careers. Those in grades 7-9 will explore a wide variety of occupational programs. Those in grades 10-12 will acquire job entry skills and make plans for continued education or entry into the world of work. Postsecondary and university programs will prepare students for skilled, highly technical, or professional occupations. Occupational guidance and counseling and cooperative work-experience will be integrated into the model at all levels with placement and followup services provided to those leaving or completing programs at secondary and postsecondary levels.

EXPECTED CONTRIBUTION TO EDUCATION

1) More students will explore occupations and more will develop positive attitudes toward the contribution of work to society.
2) More students will make occupational choices earlier.
3) Fewer students will leave school before graduation making possible an increase in the number placed in a job or enrolled in further education.

APPLICATION NUMBER: F5001VW GRANT NUMBER: 5740047

PROJECT TITLE: Specialized Career Education Staffing and a Career Oriented Curriculum

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Harold T. Lehto, Director of Career Education
St. Paul Public Schools
360 Colburne Street
St. Paul, Minnesota 55102 (612) 298-5678

FUNDING PERIOD: July 1, 1974 - June 30, 1977

OBJECTIVES

Purposes of the project are to initiate and expand career education opportunities for students in the twin cities of St. Paul and Minneapolis through 1) establishment of a close working relationship between the career education staffs of the two cities, 2) establishment of career education workshops to improve the instructional competence of city educators, 3) provision of a more comprehensive approach to career education curriculum through additional staffing, 4) release of teachers during the professional day to rewrite instructional units and infuse them with career education concepts, and 5) establishment of district-wide and individual building career education resource centers.

PROCEDURES

Project directors and staff in each city will work under respective lay boards and community councils but will meet together monthly. Initial focus of the Minneapolis component will be on seven schools (with a student population of 4,200) in the West Administrative Area. The St. Paul portion has components that are district-wide and will provide services to some 40,000 public school and 22,000 private and parochial school students. Guidance departments and principals will spearhead career education at the building level. They will establish and expand building career resource centers, provide leadership in curriculum revision, survey students regarding career awareness and interest, and establish relationships with manpower agencies for placement and followup. Curriculum revision and implementation will focus on career motivation at the K-6 level, career orientation for grades 7-9, and job preparation for grades 10-14.

EXPECTED CONTRIBUTION TO EDUCATION

1) Comprehensive, articulated K-14 career education curriculum including city-wide distribution of career-oriented instructional units.
2) Locally-produced films in career education and a series of educational television productions for elementary and secondary students in the area of careers.

APPLICATION NUMBER: F4003VW GRANT NUMBER: 4745201

PROJECT TITLE: Career Based Curriculum for Union County

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Gail Latham
Union County Schools
Box 499
Monroe, North Carolina 28110 (704) 289-5511

FUNDING PERIOD: July 1, 1974 - June 30, 1977

OBJECTIVES

1) Fuse career education into the ongoing curriculum at all levels.
2) Develop a close working relationship with the business and industrial community.
3) Develop an appropriate career education program for adults and the disadvantaged students in the community.

PROCEDURES

Administered by a project director, who will serve as director of the new career center and who reports to the superintendent of schools, career education will be introduced into 10 schools in the County (4 elementary schools, 2 middle schools, and 4 high schools). Elementary curriculum will be redesigned into interdisciplinary, interlocking instructional modules to more closely relate academic instruction to the world of careers. At junior high and middle school levels a strong guidance and counseling program will be developed and instructional modules designed to relate academic and career exploratory experiences. Hands-on experiences in the 15 occupational clusters will be provided. For grades 10-14 a new career center will be constructed as an extension of the program and campus of each high school. Its program will include 12 new skill training programs, and its staff will include academic teachers. Curriculum development work will fuse the academic and occupational programs. Portions of its facilities and program will be developed especially for the gifted and the disadvantaged. Counseling staff will implement job placement services at secondary schools, and on-the-job experiences in the community will be stressed, especially at the 12th grade level. Through cooperation with Central Piedmont Community College, special evening programs will be provided for adults and dropouts. Inservice education will be provided for teachers at all levels.

EXPECTED CONTRIBUTION TO EDUCATION

The project will implement a career education delivery system that can serve as a model for the State of North Carolina.

APPLICATION NUMBER: V274PR1B GRANT NUMBER: 24VE001

PROJECT TITLE: Development of an Exemplary Career Education Comprehensive Program in the Academic and the Vocational and Technical Education in Puerto Rico

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
José Lema Moya, Assistant Secretary
Vocational and Technical Education Programs
Commonwealth Department of Education
Cesar Gonsalez and Calaf Street
Hato Rey, Puerto Rico 00919

FUNDING PERIOD: July 1, 1974 - June 30, 1977

OBJECTIVES

1) Develop and field test career education curriculum materials for elementary, secondary, and vocational-technical schools in Puerto Rico.
2) Examine and redefine the role of the school guidance counselor in relationship to the new curriculum.

PROCEDURES

Under the supervision of the Puerto Rico Department of Education, career education curriculum will be developed at curriculum development centers in each of the six educational regions:

1) Elementary School curriculum for grades 1-2 and grades 3-6.
2) A 9-week secondary level course, "Exploration of Occupations".
3) Career-oriented quinmester curricula for grades 7-12.
4) Curriculum materials for 40 occupations within the occupational clusters for use in vocational-industrial programs in the vocational-technical schools.

A representative school district will be selected from each of the six regions and each set of elementary and secondary materials will be tested in one school in each region. The occupational curriculum will be tested in four area vocational schools, each in a different region. Guidance counselor activities and the existing placement program will be integrated with the new curriculum.

EXPECTED CONTRIBUTION TO EDUCATION

1) Adaptation of the career education concept into a curriculum for students of a different cultural background.
2) Adaptation, development, and testing of curriculum that will later be incorporated into the total school system of Puerto Rico.

PART D: DEMONSTRATION

1975 Priority: Cluster Projects (Continuations)

211

APPLICATION NUMBER: 502A950002 GRANT NUMBER: G391750038

PROJECT TITLE: Career Ladder Infusion Model Building

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Donald Bryant
Office of Career and Continuing Education
Garden Grove Unified School District
10331 Stanford Avenue
Garden Grove, California 92640

FUNDING PERIOD: July 1, 1975 - June 30, 1978

OBJECTIVES

Three objectives of the project are to increase the students' awareness of the various stages of career development; enable them to see themselves in relationship to it; and increase competency in the basic skills through performance-based curriculum.

PROCEDURES

A model will be developed for infusing career education concepts and skills into the existing curriculum for students in grades 10, 11, and 12. The target school is Pacific High School, located in a school district of 51,000 students in Orange County. An interdisciplinary approach will be used to integrate career awareness, career orientation, and job preparation with the core subjects of English, mathematics, and social studies. Inservice training will provide the staff with skills necessary to write curriculum units and activities correlated with the California "Goals for Career Education" and the five USOE occupational clusters. Units will be field tested to the satisfaction of a school/community advisory committee and an evaluation team.

EXPECTED CONTRIBUTION TO EDUCATION

The 15 USOE occupational clusters will eventually be related to each high school discipline and integrated with the existing vocational education, career counseling, work experience, and job placement program elements.

APPLICATION NUMBER: 502A950014 GRANT NUMBER: G391750039

PROJECT TITLE: Exemplary Career Education Program

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Easa Harb
Grossmont Union High School District
P. O. Box 1043
La Mesa, California 92041

FUNDING PERIOD: July 1, 1975 - June 30, 1978

OBJECTIVES

The project objectives will be to improve the present vocational education program (an extensive program including training for health occupations, diesel mechanics, aviation, business, and many other fields) by providing for counseling and articulation.

PROCEDURES

Vocational counseling programs will be set up for students enrolled in the District's 10 high schools, occupational training center, and other specialized training facilities. These include 21,000 regular day students and more than 8,500 in vocational preparation programs. Counseling will enable the high school student to formulate a career preparation education plan and will make him aware of programs not only in his school but in the District, County, State, and Nation. Articulation between programs of the high school District and the feeder schools and area community college (which have no legal association with the high school District) will be developed by carrying out the steps set up by an articulation task force.

EXPECTED CONTRIBUTION TO EDUCATION

With counseling and articulation programs to supplement the already existing vocational training program, the project will insure an exemplary high school career education program.

APPLICATION NUMBER: 502A95C015 GRANT NUMBER: G391750089

PROJECT TITLE: Operational Model for Career Development and Vocational Preparation

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Anne Upton
California State Department of Education
721 Capitol Mall
Sacramento, California 95814

FUNDING PERIOD: July 1, 1975 - June 30, 1978

OBJECTIVES

The purpose of the project is to make available to all California school districts field-tested transportable models of career development-vocational preparation programs with strong competency-based staff development and evaluation components, which will raise students' occupational aspirations and opportunities and will bridge the gap between school and the world of work.

PROCEDURES

Three State Department units (Vocational Education Support Unit, Career Education Task Force, and Pupil Personnel Services Unit) and two school districts (Fremont Unified in Alameda County and Hunting Beach Union High School District in Orange County) will establish and operate a consortium designed to develop two demonstration sites for model career education programs. The Districts, which have different organizational patterns and populations, will 1) prepare plans for evaluating and modifying their career development and vocational preparation programs around the California Model for Career Development Curriculum and 2) develop and implement a competency-based staff development program related to student and community needs. Articulation with feeder schools and junior colleges, coordination with business and industry, and integration with already developed practices and programs will be emphasized. Internal and external evaluation will provide quality control.

EXPECTED CONTRIBUTION TO EDUCATION

Districts wishing to adopt/adapt a career education program can choose the model most appropriate for their situation and population.

APPLICATION NUMBER: 502A150002D GRANT NUMBER: G310750010

PROJECT TITLE: Occupational Competence Access Project (OCAP)

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
John Post
Massachusetts Center for Occupational Education
No. 2 Sun Life Park
Wellesley Hills, Massachusetts 02181

FUNDING PERIOD: June 30, 1975 - June 29, 1978

OBJECTIVES

The purpose of the program is to create for each student a meaningful, logical sequence of school experience which will prepare him for the world of work or further education. Focus will be on increasing students' skills and abilities in relationship to employment opportunities and on increasing student ability for better career decisionmaking.

PROCEDURES

Using materials and services from Project CAREER (a research and development activity of the Massachusetts Division of Occupational Education), teachers and guidance counselors at King Philip Regional Vocational-Technical School in Wrentham and at high schools in the City of Lynn will work concurrently to develop a program with three components:

1) A Competency-Based Career Guidance System, which includes assessment of a student's interests and abilities related to the world of work. The organized, computerized information network will facilitate tentative career decisions based on integration of self awareness and career awareness.
2) Skill Outcome Exploratory Program involving the construction of learning plans which allow students to explore a number of career clusters and obtain skills in the process. Occupational and academic teachers will work together to create the interdisciplinary program.
3) Student Competency Files, a computerized recordkeeping system of occupational and academic competencies which a student has achieved. It will be used as a tool in accessing employment or further education.

EXPECTED CONTRIBUTION TO EDUCATION

1) Implementation of the same career education model in two distinct school settings.
2) A manual to facilitate the model's implementation both Statewide and Nationwide.

APPLICATION NUMBER: 502A550010 **GRANT NUMBER:** G057500047

PROJECT TITLE: Implementation of the Occupational Cluster Concept - A Curriculum Tool for Improving Career Development and Preparation Education

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Harry Miller
Program Development
Calhoun Area Vocational Center
475 E. Roosevelt Avenue
Battle Creek, Michigan 49016 (616) 968-2271

FUNDING PERIOD: July 1, 1975 - June 30, 1978

OBJECTIVES

1) Help individuals plan and make career development decisions.
2) Make available training programs that adequately fulfill the individuals' expectation.

PROCEDURES

An occupational preparation program offering expanded training options through utilization of the coordinated occupational cluster concept will be implemented in grades 11 and 12 at the Calhoun and Branch Area Vocational Education Centers. Special needs staff will work to improve programing for special needs students by developing and implementing programs for modifying and supplementing regular programs to enable special needs students to succeed in school. Program articulation will be developed with elementary, junior, and early senior high school occupational awareness and exploration programs as well as with post high school vocational technical institutes, community colleges, and other business-industry training opportunities. Strategies to familiarize secondary students with a broad range of occupations will be developed and implemented by teachers and guidance counseling staff for assisting students with career development decisionmaking. Of the 14,000 students in grades 9-12 in the area served by the project, approximately 4,200 will be enrolled in these course offerings.

EXPECTED CONTRIBUTION TO EDUCATION

The project will implement and demonstrate the application of the concept of "career clusters" as an organizational technique to facilitate the delivery of career development and occupational preparatory instruction at the high school level.

APPLICATION NUMBER: 502A150001D GRANT NUMBER: G310750007

PROJECT TITLE: Project Bridges: Spanning the Gap Between Education and Earning a Living

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Susan E. Klaiber
Project Bridges
Somersworth High School
Memorial Drive
Somersworth, New Hampshire 03878 (603) 692-2431

FUNDING PERIOD: July 1, 1975 - June 30, 1978

OBJECTIVES

1) Eliminate the gap between school and earning a living for the youth of the Somersworth School District.
2) Develop further cooperation between public education and the local business/industry community.
3) Expand occupational aspirations and opportunities for all youth.

PROCEDURES

The project will focus at first on the guidance, preparation, and placement of high school "vocational students" with emphasis given to continuation of a career development program for all students throughout the duration of the project. Program components include:

1) Guidance and Counseling. A guidance team for each student will include parents, vocational teacher/advisor, counselor, and student. A guidance gate checklist will be developed and maintained for each student.
2) Elementary Career Awareness. District guidance personnel will conduct career awareness update presentations for teachers.
3) Middle School Career Exploration. Two new hands-on job exploration options will be added each year to each of the five occupational clusters.
4) Occupational Preparation. Offerings will be expanded in clusters of agribusiness, construction, business and office, hospitality and recreation, and communications and media. At least one new in-school vocational program will be started in each cluster each year for three years. Satellite programs will be developed in the community. Twenty training stations and instructors in public business will be developed the first year and an additional twenty in private business and industry the second year. Workshops for local occupational specialists will train them to be effective vocational teachers.
5) Placement activities will be expanded for in- and out-of-school youth.

EXPECTED CONTRIBUTION TO EDUCATION

The District will better fulfill its responsibility to insure equal career preparation opportunities for its youth.

APPLICATION NUMBER: 502A25001 GRANT NUMBER: 3207500023

PROJECT TITLE: Wayne Design for Career Education

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Adrian Van Zweden
Wayne Board of Education
50 Nellis Drive
Wayne, New Jersey 07470 (201) 694-8600

FUNDING PERIOD: July 1, 1975 - June 30, 1978

OBJECTIVES

The project has 25 goals aimed at development of a career education program for the Wayne Public School District. These goals focus on three areas:

1) Career guidance and intensive counseling.
2) Articulation (providing linkages between various levels).
3) Introduction of five occupational clusters.

PROCEDURES

The project will operate through a Career Education Task force headed by the Superintendent of Schools. The program will serve the approximately 11,500 students in 11 elementary, 3 middle, and 2 high schools. Existing research, materials, and experiences drawn from national, state, and local levels will be investigated and adapted to the District. Curriculum development will focus on "Technology for Children" units on the elementary level, "Introduction to Careers" cycles in the middle grades, and "Career Preparation" components in the upper grades. Articulation will provide linkages with vocational-technical education, college, adult and continuation education, and employment opportunities. Inservice courses and workshops will precede implementation. Job placement activities, school/industry coordination, and multimedia services will be developing simultaneously. Evaluation, internal as well as third-party, will be continuous to provide the Task Force with recommendations for revision, updating, expansion, or deletion of program elements.

EXPECTED CONTRIBUTION TO EDUCATION

Dissemination of experiences and results will be planned as an integral part of the project so that many elements can be transported to other districts and agencies concerned with career development.

APPLICATION NUMBER: 502A25002 GRANT NUMBER: 3207500031

PROJECT TITLE: Systemwide Career Education Cluster-Based Articulated Model Program: K-Graduate Education

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
David A. Bickimer
New York City Board of Education
Office of Education Planning and Support
Office of Career Education
110 Livingston Street
Brooklyn, New York 11201 (212) 596-8052

FUNDING PERIOD: July 1, 1975 - June 30, 1978

OBJECTIVES

Demonstrate the following at one model site in each of the five boroughs of the City of New York School District:

1) Fusion of academic and vocational education.
2) Fusion of guidance and instruction.
3) Infusing of social psychological elements of career awareness, exploration, and preparation into all instruction.
4) Systematic utilization of the community as an instructional resource.

PROCEDURES

The infusion of eight career education elements (Ohio State Model I) and five relevant clusters in the various model sites will be accomplished through selective teacher/education management training sessions. (Each site will include a network of schools, kindergarten through graduate education.) Articulation linkages with graduate and undergraduate institutions will afford college credit for necessary staff development procedures. In the first year curriculum materials will be developed, tested, and revised at site 1 (Manhatten): Awareness Modules (elementary), Exploration Modules (junior high), and Preparation Modules (high school). Development will then begin at site 2 (Brooklyn) and site 3 (Bronx). Counseling departments at each site will be oriented to the five clusters relevant to that site and will constitute a career counseling center for that site. Individualized programs will be developed for the mentally, physically, and emotionally handicapped. All interested nonpublic schools in each site will also be involved. Two business representatives for each occupational cluster will be identified for each site. They will be oriented to career education concepts, principles, and procedures and will serve as community representatives to orient teachers to clusters, give advice on curriculum, and take an integral part in career education instruction.

EXPECTED CONTRIBUTION TO EDUCATION

Each model, located in a borough, will build mechanisms and utilize strategies for dissemination systemwide, but especially within the borough.

APPLICATION NUMBER: 502A150003D GRANT NUMBER: G310750011

PROJECT TITLE: Student Plans and Career Clusters

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Pasquale DiLego
Career Education Project
Edmunds Junior High School
Burlington, Vermont 05401 (802) 863-4521

FUNDING PERIOD: July 1, 1975 - June 30, 1978

OBJECTIVES

1) Reduce the potential for youth unemployment.
2) Create bridges between school and earning a living.
3) Contribute to promoting cooperation between public education and manpower needs.
4) Broaden occupational aspirations and opportunities for youth.

PROCEDURES

The project will implement and demonstrate a career education program at Edmunds Junior High School that will have three components:

1) Preselected clusters (construction, consumer and homemaking related occupations, fine arts and humanities, transportation, and business and office practices) which will be integrated into curriculum materials and programs in the subject matter areas of the creative arts, English, mathematics, sciences, social studies, foreign languages, vocational and special education offerings.
2) Individual student development plans to be worked out by guidance counselors and students to coordinate the student's school program with his career choices.
3) Articulation of the junior high school career clusters with programs offered in the high school and its vocational center.

Responsibilities for governance of the project will be shared by the Vermont State Department of Education and the Burlington School System.

EXPECTED CONTRIBUTION TO EDUCATION

Information will be disseminated to Vermont's career education programs to encourage replication of activities in other school districts.

APPLICATION NUMBER: 502A950004 GRANT NUMBER: G391750090

PROJECT TITLE: Career Education Materials Development for Comprehensive Guidance Counseling Implementation at the Senior High School Level

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
David Ramarui, Director of Education
Department of Education Headquarters
Saipan, Mariana Islands 85202

FUNDING PERIOD: July 1, 1975 - June 30, 1978

OBJECTIVES

This project proposes to better preserve the options of the student and to provide him the knowledge required to decide for himself how far and in what direction he will go educationally. Principal goals are to 1) structure the entire program around real life activities, 2) integrate academic knowledge and skills with occupational training, 3) include in the program community resources and non-school educational opportunities, and 4) provide for each student a program relevant to his becoming a productive, contributing citizen through an extensive career counseling-oriented curriculum.

PROCEDURES

The District Pre-Vocational Coordinator (PVC) will work with the staff of Ponape Island Central School (PICS) assisting them in the compiling of material. He will conduct teacher training sessions with teachers involved in curriculum testing. Focus will be on the responsibility of the school in relation to post-school opportunities for students within the framework of present community needs and possible future needs of Micronesia. The PVC will continue to serve as a resource and support person for classroom teachers and participating students.

EXPECTED CONTRIBUTION TO EDUCATION

The PVC, in visiting and observing classes, will evaluate the new materials for demonstration and dissemination of relevant curriculum development concepts and techniques. Dissemination will focus on the total student body of PICS and high school staffs throughout the Trust Territory.

APPLICATION NUMBER: 502A25003 GRANT NUMBER: G391750010

PROJECT TITLE: Virgin Islands Exemplary Vocational Career Education Center

PRINCIPAL INVESTIGATOR AND ORGANIZATION:

Albert Ragster
Virgin Islands Department of Education
Division of Vocational-Technical Education
P. O. Box 630
St. Thomas, Virgin Islands 00801 (809) 774-3046

FUNDING PERIOD: July 1, 1975 - June 30, 1978

OBJECTIVES

This project continuation will focus on orientation of the availability and usage of the career education resource center.

PROCEDURES

Approximately 8,000 pieces of resource materials will be cataloged during the academic year. Workshops and seminars involving administrators, counselors, and teachers will be conducted during the year. Professional consultants will be employed whose expertise is expected to have valid input into the total project.

PART I: CURRICULUM DEVELOPMENT

GRANT NUMBER: G007500179

PROJECT TITLE: Western Curriculum Coordination Center

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
James Becket, Director
Western Regional Curriculum Network
Vocational Education Section
721 Capitol Mall
Sacramento, California 95814 (916) 445-6726

FUNDING PERIOD: April 1, 1976 - December 31, 1976

The primary mission of the Western Curriculum Coordination Center is to provide leadership for and implementation of a regional vocational education curriculum effort for Arizona, California, Hawaii, Nevada, American Samoa, Guam, and the Trust Territories of the Pacific Islands. The major objectives are to 1) combine a variety of specialized services and curriculum materials in such a way that teachers and administrators throughout the region are given maximum assistance in the implementation of vocational education in local schools and 2) organize those aspects of the Curriculum Coordination Center in such a way that maximum information and data are provided to each State and Territory, while a high degree of efficiency is maintained and the cost of such service is minimized. To accomplish these objectives, activities will be grouped into five areas: coordination, communication, cooperation, curriculum development, and evaluation. Coordination will be achieved through not less than three, 2-day coordination meetings and periodic conference telephone calls. Communication activities include a regional newsletter developed and disseminated to a least 4,000 people every 4 months and monthly newsletters circulated "round robin" among regional members. Teachers, administrators, teacher educators, curriculum developers, and researchers will be cooperatively involved in all activities. There will be three meetings held to work toward development of a common core curriculum for all vocational subject areas and a common format will be designed and disseminated for the development of all curriculum in the region. Regional curriculum work will receive internal and external formative and summative evaluation.

APPLICATION NUMBER: 496AH60010 GRANT NUMBER: G007601904

PROJECT TITLE: East Central Curriculum Coordination Center

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Rebecca Douglass, Director
East Central Regional Curriculum Network
Professional & Curriculum Development Unit
Division of Vocational-Technical Education
100 N. First Street
Springfield, Illinois 62777 (217) 782-7084

FUNDING PERIOD: April 1, 1976 - December 31, 1976

The East Central Curriculum Coordination Center provides leadership to and coordinates curriculum planning, development, and dissemination in Delaware, District of Columbia, Illinois, Indiana, Maryland, Michigan, Minnesota, Ohio, Pennsylvania, Virginia, West Virginia, and Wisconsin. The primary goals and objectives for achieving these goals are:

1) Improve and expand upon regional curriculum services and capabilities by duplicating existing curriculum materials received from sources other than the Illinois State Department, developing a catalog of library holdings, facilitating more penetration into the user market by acquisition of bio-data, coordinating and integrating activities with the NIE Dissemination Project, and providing inservice training to curriculum users.
2) Disseminate curriculum information and available materials to participating states to share information and plans and reduce duplication by acquiring and disseminating curriculum products, distributing curriculum information, conducting two regional conferences, and publishing a regional newsletter, a Hot Line sheet, the National Network Newsletter, and a regional annotated bibliography.
3) Establish and maintain a system for determining and reporting curriculum needs by developing a format for a comprehensive curriculum needs assessment instrument, conducting annual assessments, and establishing priorities.
4) Coordinate curriculum development activities among the states to minimize duplication by developing a comprehensive curriculum development activities reporting form, collecting curriculum development activities annually, and distributing this information to participating states.
5) Establish and maintain an evaluation system for all curriculum coordination by developing a format for reporting coordination efforts, and reporting and reviewing data twice a year.
6) Serve as an active and functional member of the National Network of Curriculum Coordination in Vocational and Technical Education by conducting coordination, dissemination, and diffusion activities to improve the acceptance of new curriculum products and to assess their impact, and by providing curriculum services which will encourage the adaptation, demonstration, and adoption of effective curriculum and curriculum development practices.

GRANT NUMBER: G007500178

PROJECT TITLE: Southeast Curriculum Coordination Center

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
James Wall
Southeast Regional Curriculum Network
Mississippi State University
Research and Curriculum Unit
Drawer JW
Mississippi State, Mississippi 39762 (601) 325-5878

FUNDING PERIOD: April 1, 1976 - December 31, 1976

The mission of the Southeast Curriculum Coordination Center is to coordinate in USOE Region IV (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee) the management of resources for curriculum in vocational and technical education in order to maximize efforts in curriculum research, development, dissemination/diffusion, and evaluation. Major activities can be grouped into three main categories:

1) Coordination. To assess the curriculum needs of the states in the region and to maintain interaction and communication concerning curriculum.
2) Dissemination/Diffusion. To provide information and material to State Liaison Representatives and other curriculum centers, to provide assistance to states in dissemination/diffusion efforts, and to aid in disseminating information about sponsored curriculum research and development projects.
3) Curriculum Effectiveness/Standards. To improve effectiveness and transportability of materials, to improve evaluation of curriculum materials and their usage, and to improve curriculum research and development strategies.

APPLICATION NUMBER: 496AH60007 **GRANT NUMBER:** G007601801

PROJECT TITLE: Northeast Curriculum Coordination Center

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Joseph Kelly
Northeast Regional Curriculum Network
Bureau of Occupational Education
Division of Vocational Education
225 West State Street
Trenton, New Jersey 98625 (609) 292-6562

FUNDING PERIOD: April 1, 1976 - December 31, 1976

The primary goal of the Northeast Curriculum Coordination Center is to assist regional member states (Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Vermont, Rhode Island, Puerto Rico, and the Virgin Island) to more effectively plan and coordinate their curriculum development and dissemination. Major objectives are to: 1) share information and disseminate products among the states and regions regarding curriculum materials available and under development; 2) develop and recommend guidelines for increasing the effectiveness and transportability of curriculum materials as tools for the improvement of teaching-learning situations; 3) establish and maintain a system for determining curriculum needs in vocational-technical education and for reporting conclusions to vocational-technical educators; 4) coordinate curriculum development and utilization activities among the states in order to avoid duplication and enhance the quality of effort; and 5) report to vocational-technical personnel the results of curriculum coordination efforts. Activities to achieve these goals include development of internal dissemination networks; design of a state curriculum dissemination network model which provides alternative organizational and cost options to allow implementation in different states; development of dissemination plans for each state and guidelines for enhancing curriculum transportability; and a comprehensive review of existing curriculum activities to reduce duplication.

APPLICATION NUMBER: 496AH60003 GRANT NUMBER: G007601903

PROJECT TITLE: Midwest Curriculum Coordination Center

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Bob Patton, Director
Midwest Regional Curriculum Network
Oklahoma State Department of Vocational and Technical Education
1515 West 6th Avenue
Stillwater, Oklahoma 74074 (405) 377-2000

FUNDING PERIOD: April 1, 1976 - December 31, 1976

The primary mission of the Midwest Curriculum Coordination Center is to provide leadership for maximizing resources for curriculum management through coordination of efforts in development, dissemination, and diffusion in Arkansas, Iowa, Kansas, Louisiana, Missouri, Nebraska, New Mexico, Oklahoma, and Texas. The major objectives are to 1) coordinate curriculum activities of the Midwest Curriculum Network; 2) provide curriculum information and materials to each participating state, other federally funded centers, USOE Regions VI and VII, and the curriculum branch of USOE; 3) provide the means for each state in the region to apply the systems approach in development and use of curriculum materials; and 4) devise standards for curriculum development in order to increase transportability of curriculum materials. Selected activities include conducting four regional curriculum planning meetings; collecting abstracts of new curriculum in the region on a bimonthly basis; developing a profile of regional curriculum projects; publishing two regional newsletters; sharing one copy of all new materials developed in the region with other states and agencies; providing for printing and distribution of newly developed curriculum materials; providing curriculum materials microfiche service (including ERIC computer searches) to participating states to assist in planning, developing, and disseminating curriculum materials; developing a model for identifying curriculum material needs in states and regions; and developing standards in formating, validating, and field testing curriculum materials in the region.

APPLICATION NUMBER: 496AH60004 GRANT NUMBER: G007601901

PROJECT TITLE: Northwestern Curriculum Coordination Center

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
William Daniels
Northwestern Regional Curriculum Network
Washington State Commission for Vocational Education
Building 17
Airdustrial Park
Olympia, Washington 98504 (206) 753-0879

FUNDING PERIOD: April 15, 1976 - December 31, 1976

The Northwestern Curriculum Coordination Center will provide leadership for planning, improving, and coordinating curriculum development and providing curriculum services to Alaska, Colorado, Idaho, Montana, North Dakota, Oregon, South Dakota, Utah, Washington, and Wyoming. Major objectives are to: 1) improve curriculum services and capabilities of the region; 2) coordinate efforts of the individual states in the preparation of curriculum materials by sharing current information and plans regarding curriculum materials and needs in order to reduce duplication; 3) plan for cooperation in development, testing, evaluation, dissemination, reproduction, and implementation of materials by, among other things, implementing a standard format for curriculum development in all occupational fields; 4) develop and maintain intrastate and interstate liaison activities that will stimulate cooperative relationships at regional, state, and local levels; 5) provide curriculum services which will encourage the adaptation, demonstration, and adoption of effective curricula and curriculum development practices in vocational and technical education, including materials produced by other government agencies; 6) identify and/or design alternative strategies for the delivery of vocational services to persons in rural/small/isolated communities that exist in many geographic sections of the sparsely populated states in the region; and 7) participate as an active member of the Council of the National Network of Curriculum Coordination in Vocational and Technical Education.

CONTRACT INCREASE CONTRACT NUMBER: OEC0749286

PROJECT TITLE: Develop Curricula for Training Vocational Education Curriculum Specialists

PRINCIPAL INVESTIGATOR AND ORGANIZATION:

James Dunn
American Institutes for Research
P. O. Box 1113
Palo Alto, California 94302

FUNDING PERIOD: July 1, 1974 - October 31, 1976

OBJECTIVES

The major objectives of this project are to: 1) develop and test curricula and supporting materials for use in university training programs for vocational education curriculum specialists; and 2) develop an installation plan for use by university administrators as a guide for the organization, operation, and evaluation of graduate level training of vocational education curriculum specialists.

PROCEDURES

1) Form an advisory panel of nationally known experts to serve the project.
2) Develop curriculum based on an analysis of the tasks and training needs of vocational education curriculum specialists using approximately 15 competency-based modules to support individualized self-paced instruction, group instruction, or combinations of both. The curriculum can serve part-time students as well as full-time students who are able to participate in on-campus university instruction.
3) Field test implementation process and curriculum program at a large major university and at smaller universities.
4) Provide for USOE a technical report which documents development, testing, and installation of products; application of quality assurance procedures for the project; and delivery of approved outcomes.

EXPECTED CONTRIBUTION TO EDUCATION

The following products will be developed: 1) a curriculum program for a competency-based curriculum specialist training, 2) a program installation guide, and 3) a final technical report.

CONTRACT NUMBER: 300760051 and 300760078

PROJECT TITLE: Modification of Ten Public Service Occupational Films

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
David Russell
D/R Productions, Inc.
811 Radcliffe Avenue
Pacific Palisades, California 90272

FUNDING PERIOD: March 4, 1976 - OPEN

OBJECTIVES

The purpose of these projects is to finalize, through required modifications, ten 27 1/2 minute sixteen millimeter sound, color instructional films based on the "common core for public services" curriculum materials which have been developed as part of a federally-funded curricula project for the Public Services Occupational Cluster (OEC0747925).

PROCEDURES

The modifications are based on the recommendations made by two film review panels comprised of USOE program and public affairs personnel. The films, targeted primarily at blue collar workers and the out-of-school population, 18-30 years of age, are designed for use by television presentation in community colleges, technical schools, adult learning centers, etc.

EXPECTED CONTRIBUTION TO EDUCATION

The finalized end products include a series of ten "Common Core" instructional films pertaining to entry-level public service positions. These films are:

1) Introduction to Public-Service Occupations
2) Person-to-Person Relationships
3) Oral Communications
4) Written Communications
5) Basic Report Writing
6) Basic Recordkeeping
7) Good Grooming
8) The Interview
9) Decision Making
10) Applying for a Public Service Position

CONTRACT NUMBER: 300760306

PROJECT TITLE:	Development of Curricula for Vocational Preparation of the Gifted and Talented Students in Secondary and Post-Secondary Education
PRINCIPAL INVESTIGATOR AND ORGANIZATION:	Bruce G. Milne, Director Educational Research & Service Center University of South Dakota Vermillion, South Dakota 57069 (605) 677-5451
FUNDING PERIOD:	July 1, 1976 - June 30, 1977

OBJECTIVES

The purpose of this project is to create an awareness on the part of vocational educators, guidance and counseling personnel, and other related professional personnel of the potential opportunities in secondary and postsecondary vocational programs for gifted and talented students. Specific objectives are to 1) synthesize the available resources on vocational education, gifted/talented education, and counseling/guidance into curricular materials; 2) conduct five bi-regional awareness conferences for five-person teams from each state; and 3) develop state plans for the recruitment and inclusion of gifted/talented students in vocational programs.

PROCEDURES

1) Review the literature to synthesize the current status of vocational education programs, guidance/counseling practices, and gifted/talented education.
2) Prepare curricular and conference materials based upon the literature search.
3) Select five-person teams from each state through contact with each regional office and chief state school official.
4) Establish conference dates, sites, consultants, and program.
5) Conduct five bi-regional conferences.
6) Disseminate developed curricular materials to each state, territory, and designated agency.
7) Compile final draft of each state operational and planning program.
8) Prepare and deliver a final technical report.

EXPECTED CONTRIBUTION TO EDUCATION

The following products will be available for dissemination: an awareness slide/cassette/production with accompanying brochure on the vocational preparation of gifted and talented students, a vocational teacher's resource guide, a guidance counselor's manual, and an operational and planning instrument for developing a state plan.

CONTRACT NUMBER: 300760356

PROJECT TITLE: Development of a Nuclear Reactor Operator Technician (Trainee) Curriculum

PRINCIPAL INVESTIGATOR AND ORGANIZATION:

Daniel Hull
Technical Education Research Center
4201 Lakeshore Drive
Waco, Texas 76710 (817) 772-8756

FUNDING PERIOD: July 15, 1976 - July 14, 1977

OBJECTIVES

The goal of this project is the development, preliminary refinement, and limited dissemination of a Nuclear Reactor Operator Technician (Trainee) Curriculum. Composed of 15 technical specialty courses, the curriculum is for a 2-year postsecondary preparatory program and is to be adaptable for use in preparatory and upgrading types of industrial training programs. The project will develop 94 modules in 13 courses (12 modules for the first 2 courses were developed in a previous project). In addition, a comprehensive program planning guide to assist in implementing both postsecondary and industry-based training programs for preparatory and upgrading purposes will be developed.

PROCEDURES

1) Utilize a national steering committee in the field of nuclear reactor operation and technician training to advise in the technical content and quality of the educational objectives of each course and module.
2) Enlist authors who are technical specialists to prepare the module drafts.
3) Develop module tests to assess student competency.
4) Have drafts of modules for the courses reviewed by technically competent editors to insure that they meet industrial needs, usability in postsecondary and industrial programs and technical accuracy.
5) Revise modules as required and provide copies to the Office of Education.
6) Develop, submit for review, and revise a program planning guide.

EXPECTED CONTRIBUTION TO EDUCATION

The products to be developed for dissemination are: ten sets of the instructional modules and tests, organized as 15 courses for the Nuclear Reactor Operator Technician (Trainee) program.

CONTRACT NUMBER: 300760308

PROJECT TITLE: Proposed Design and Broad Content Outlines for Curriculum Materials in Marketing and Distribution - Phase I

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Richard L. Lynch and Donald P. Kohns
Division of Vocational and Technical Education
Virginia Polytechnic Institute and State University
Blacksburg, Virginia 24061 (703) 951-5191

FUNDING PERIOD: July 1, 1976 - June 30, 1977

OBJECTIVES

The purpose of this national curriculum project (completed in two phases) is to develop instructional guides for the 19 subcluster occupations currently assigned by the USOE for the vocational program area of distributive education. Phase I of this project will consist of the establishment of the design (theoretical framework) and broad content outlines to be used as the foundation for the development of the 19 guides.

PROCEDURES

Reviews of literature and research will be conducted to assist in the preparation of the theoretical framework. The framework will be written by the project staff and submitted to a panel of consultants for their review prior to its adoption. Content outlines for the 19 occupational subclusters in marketing and distribution will be developed utilizing the following procedures:

1) Subcluster competencies previously identified and utilized in related research and developmental projects will be compiled.
2) Inquiries of marketing and distribution business and industry representatives to obtain additional competencies will be conducted.
3) All competencies identified will be evaluated in terms of subcluster appropriateness, clarity, and specificity. Subcluster consultants will be employed to assist in the competency evaluations for specific subclusters.
4) Subcluster competencies will be converted to enabling and terminal instructional objectives.

EXPECTED CONTRIBUTION TO EDUCATION

The theoretical framework produced by this project will assist curriculum designers with incorporating competency learning theory, career development theory, and vocational and distributive education principles and concepts in the 19 occupational instructional guides. The compilation and synthesis of competencies required for successful performance of subcluster occupations will provide needed information for the organization and sequencing of instructional guide content.

PURCHASE ORDER NUMBER: P00760452*

PROJECT TITLE: Consultant Services to the National Network for Curriculum Coordination

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Rebecca Douglass
Illinois Office of Education
Department of Adult, Vocational/Technical Education
100 North First Street
Springfield, Illinois 62778 (217) 782-7084

FUNDING PERIOD: September 15, 1976 - November 15, 1976

Services to be provided under this purchase order include the handling of arrangements for the consultant services of 12 non-Federal representatives of curriculum and research organizations to meet in South Plainfield/Piscataway, New Jersey on October 28, 1976. The consultants will meet with the Project Directors of the six curriculum coordination centers and advise with them concerning 1) the functions and objectives of the network; 2) improving the efficiency and effectiveness of network services; and 3) coordination of resources, dissemination, and diffusion activities which are responsive both to State and Office of Education curriculum objectives.

PURCHASE ORDER NUMBER: P00760447*

PROJECT TITLE: Handling Distribution of Marketing and Distribution Materials

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Alice Gordon
Contract Research Corporation
25 Flanders Road
Belmont, Massachusetts 02178 (617) 489-3150

FUNDING PERIOD: September 13, 1976 - September 30, 1976

This purchase order is for the packaging and mailing of 350 sets of materials produced under OEC-0-73-5233.

---

*Purchase orders are written for amounts less than $10,000.

PURCHASE ORDER NUMBER: P00760463*

PROJECT TITLE:	Updating and Revising *"Distributive Education in the High School"*
PRINCIPAL INVESTIGATOR AND ORGANIZATION:	Vivien K. Ely Virginia Commonwealth University Secondary/Postsecondary Department School of Education Richmond, Virginia 23284 (804) 770-8296
FUNDING PERIOD:	September 1, 1976 - March 31, 1977

Eight camera ready copies of a guide for distributive education based on updating and revising the publication *Distributive Education in the High School* will be prepared. Although no major revision is contemplated, the new product will not be limited to the high school, but will address the entire spectrum of program offerings and will take into consideration the following factors: 1) implications of new legislation; 2) the recent development of exploratory materials (Part I) for marketing and distribution occupations; 3) consideration of existing and possible revision of OE taxonomy of instructional programs; 4) appropriate references to career education; 5) recent studies of DECA objectives; 6) examination of competency-based instruction; 7) relationship to ongoing curriculum development project (Part I) in marketing and distribution; and 8) broadened focus on levels of employment.

PURCHASE ORDER NUMBER: P00760481*

PROJECT TITLE:	Rental Services for Public Service Films
PRINCIPAL INVESTIGATOR AND ORGANIZATION:	John Constance National Audiovisual Center National Archives & Records SVC General Services Administration Washington, D.C. 20409 (202) 763-1882
FUNDING PERIOD:	September 23, 1976 - September 30, 1977

This purchase order is for a rental program, 1,000 sets of workbooks, and promotional material.

---

*Purchase orders are written for amounts less than $10,000.

PART J: BILINGUAL VOCATIONAL TRAINING

APPLICATION NUMBER: 558AH60163 GRANT NUMBER: G007604109

PROJECT TITLE: A Bilingual Vocational and Technical Intensive-Study Training Program

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Robert B. Gibson, Program Director
Vocational Education
Kuskokwim Community College
P.O. Box 368
Bethel, Alaska 99559 (907) 543-2621

FUNDING PERIOD: July 1, 1976 - June 30, 1977

OBJECTIVES

The purpose of the program is to offer short-term, intensive, bilingual vocational training to Alaskan Natives living in the region served by the college who are unable to benefit from existing programs because of their lack of basic education, limited English skills, and inability to leave their villages. Specific objectives are to enable the trainees to 1) compete successfully for local jobs, 2) seek further education, and 3) make better use of modern technology for maintaining a subsistence lifestyle.

PROCEDURES

With the assistance of three bilingual technical experts, courses in welding, house framing, home heating, electricity, and small engine repair will be offered in five separate villages. Course offerings will be geared to the seasonal activities taking place in those villages at the time offered. Each course will be competency-based and designed for 80 hours of instruction during a two-week period. Evaluation will be conducted on two levels: 1) evaluation of each course as determined by the performance of the trainees, and 2) evaluation of the effectiveness of the entire program. An outside evaluator will design an evaluation instrument, and make onsite visits. A followup survey of participants will also be conducted. Yupiktak Bista, the nonprofit arm of the Regional Native Corporation, Calista, will serve as co-sponsor in this effort and will provide the recruitment service necessary.

EXPECTED CONTRIBUTION TO EDUCATION

It is anticipated that instruction will be provided to between 50 and 200 people during the academic year, and that this exposure will encourage some of them to seek further education and/or qualify for immediate employment as local job opportunities increase.

APPLICATION NUMBER: 558AH60026 GRANT NUMBER: G007603729

PROJECT TITLE: Bilingual Agricultural Equipment Operation and Maintenance

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
William H. Boakes, Coordinator, Vocational Education
Solano County Superintendent of Schools
Regional Occupational Program
2100 West Texas Street
Fairfield, California 94533 (707) 429-6575

FUNDING PERIOD: September 1976 - June 1977

OBJECTIVES

The purpose of this project is to provide special training for 25 Spanish American migrant farm workers to develop proficiency in agricultural equipment operation and maintenance to enable them to become employable on a year-round basis.

PROCEDURES

The program will be operated under the Solano County Superintendent of Schools as a special section of the Regional Occupational Program. It will utilize an existing farm with the equipment and facilities on a lease basis. Scheduled for the normal period of migrant unemployment, the program will have open enrollment and an individualized schedule, allowing the workers to enroll as the harvest season slows down and they are released from their regular jobs. The program is planned to operate Monday through Friday, three hours per day for a total of 15 hours per week, but hours may be arranged to suit individual needs. Curriculum materials will be printed in both English and Spanish, with audio tapes to assist the poor readers. The bilingual vocational instructor will be assisted by a Spanish-speaking mechanic. Counseling and placement services, as well as administrative support, will be provided, and close liaison will be maintained with existing local agencies.

EXPECTED CONTRIBUTION TO EDUCATION

It is anticipated that at least half of the students successfully completing the program will find employment in a training-related occupation.

APPLICATION NUMBER: 558AH60044 GRANT NUMBER: G007603805

PROJECT TITLE: Bilingual Vocational Training of Dental Assistants

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Fredric Weissman
Continuing Education in Health Sciences-Dentistry
University Extension
University of California, Los Angeles
405 Hilgard Avenue
Los Angeles, California 90024 (213) 825-7291

FUNDING PERIOD: July 1, 1976 - June 30, 1977

OBJECTIVES

The project will continue and further develop an ongoing bilingual vocational training program to assist low-income language-disadvantaged persons in the Central City Los Angeles area to acquire the manual and academic skills necessary to work as dental paraprofessionals. Specific objectives are to 1) provide 1,092 hours of bilingual training to 50 persons, 2) extend dental health care delivery systems and services to a greater number of persons of limited or no English-speaking ability through utilization of bilingual paraprofessionals who are capable of performing expanded functions, 3) provide high-quality vocational training having long-term career opportunities and immediate gainful employment, and 4) provide a model for other similar programs.

PROCEDURES

Recruitment procedures involve contacts with public service agencies and community dentists. The 1-year program is divided into three modules of 12 weeks each, 30 hours per week. In addition to lectures and laboratory and clinical training in dental practices and procedures, the curriculum includes courses in English, psychology, and speech. Emphasis will be placed on performance in an actual clinical setting, and ESL instruction will be offered for program participants in two types of courses: a 2-week session on general English, and a 12-week course on vocational English as related to dentistry. Community agencies, practicing dentists, the Los Angeles County Dental Society, and the Advisory Board will assist in job placement of graduates, and followup surveys will be conducted to determine the effectiveness of the program.

EXPECTED CONTRIBUTION TO EDUCATION

1) Fifty formerly unemployed persons will be trained for long-term employment.
2) The demand of community dentists for bilingual assistants will be partially met.
3) Extended health services will be available to the community.
4) The program model and materials developed may assist in the implementation of similar programs.

APPLICATION NUMBER: 558AH60138 GRANT NUMBER: G007603737

PROJECT TITLE: Bilingual Vocational Training in Agricultural Occupations

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Chris Zachariadis
Central Coast Counties Development Corporation
410 Kennedy Drive
Capitola, California 95010

FUNDING PERIOD: July 1, 1976 - June 30, 1977

OBJECTIVES

1) Provide bilingual vocational training to 25 low-income farmworkers of limited English-speaking ability in the operations and management of open field and greenhouse farming, including row crop and greenhouse production and the management of a production cooperative.
2) Provide bilingual vocational training to 135 low-income farmworkers of limited English-speaking ability in selected areas of greenhouse production, farm surveying, marketing, and small business management.
3) Develop and test bilingual instructional materials for vocational training in the operation and management of open field and greenhouse farming.

PROCEDURES

1) Identification and preliminary evaluation of the participant group.
2) Selection of the group and development of learning and work contacts.
3) Initiation of intensive skill training in production processes utilizing a field-based, experiential, competency-based approach.
4) Introduction of formal training in business management to accompany the skill training.
5) Intensive training in row crop production.
6) Formation of a new organization to provide self-employment for the members.
7) Conduct of a summative impact evaluation. Observer, staff, and peer evaluations will be made during the course of the program.
8) Local school districts will provide support in program implementation, as well as in the establishment of appropriate supportive training such as reading instruction and the use of the English language.

EXPECTED CONTRIBUTION TO EDUCATION

1) A production cooperative of 25 members.
2) Job placement of 70 percent of the 135 farmworkers.
3) Tested instructional materials available for distribution.

APPLICATION NUMBER: 558AH60160 GRANT NUMBER: G007603739

PROJECT TITLE: Chinese ESL/Machinist Vocational Training Project

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Thomas R. Henderson, Director
San Francisco Community College Skills Center
1311 Sutter Street
San Francisco, California 94109 (415) 441-1176

FUNDING PERIOD: June 1, 1976 - May 31, 1977

OBJECTIVES

This project will provide training for machinists or machine-related jobs to 50 Chinese people with limited English-speaking ability.

PROCEDURES

The training period will consist of two 25-week cycles of 16 hours per week combining 20 hours of ESL classroom and six hours of machine shop experience. Each trainee will have an individualized program based upon need, experience, and ability. The ESL curriculum will focus on the fundamentals of machine operations, machine shop terminology, and the essential tools of the mechanic. The program will be evaluated by the use of behavioral objectives. Each trainee will be required to pass safety tests as well as formal and informal tests in English and video tapes will be used for individual and group evaluations. Individual counseling and tutoring will be an essential part of the training program.

EXPECTED CONTRIBUTION TO EDUCATION

As a result of the program, the trainees will have developed sufficient English proficiency and vocational skills to compete successfully in the job market.

APPLICATION NUMBER: 558AH60164 GRANT NUMBER: G007603740

PROJECT TITLE: Bilingual Training for Indochinese Refugees

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Robert A. Wright
Community Care & Development Services
1450 W. Venice Blvd.
Los Angeles, California 90006 (213) 747-9611

FUNDING PERIOD: July 1, 1976 - June 30, 1977

OBJECTIVES

The purpose of the program is to meet the special vocational education needs of Indochinese refugees who have the basic academic qualifications to become self-supporting but need retraining in a white collar or paraprofessional occupation. Specific objectives are to provide instruction in an integrated curriculum that combines Basic Ed/ESL with training in one of three occupational areas: clerical, data processing, and health care. Supportive services in the form of counseling and job placement will also be provided.

PROCEDURES

Thirty trainees will be enrolled in the clerical program, which will cover business composition and grammar, typing, and shorthand. Ten participants will be trained in data processing, and 30 in health care. The ESL component will incorporate the speaking, listening, reading, and writing skills necessary for the trainees to achieve competency in English as well as in their selected skill area in order to obtain a job. The Basic Ed/ESL component will be 18 weeks and the vocational training 6 months, for a total 10-month training period. The instructional staff will be supplemented by a social worker and a job placement counselor to facilitate successful completion of the training and placement of graduates in unsubsidized employment. The bilingual instructional staff will work with consultants in developing bilingual curriculum materials in English and Vietnamese for the three skill areas. Evaluation will be based on individual student achievement and overall success of the program in meeting its objectives.

EXPECTED CONTRIBUTION TO EDUCATION

The primary result of the project will be the satisfactory completion of training and subsequent job placement of the refugees. Additionally, the English/Vietnamese curriculum materials will be available for dissemination.

APPLICATION NUMBER: 558AH60023	GRANT NUMBER: G007603728

PROJECT TITLE:	Bilingual-Bicultural Human Services Training Consortium
PRINCIPAL INVESTIGATOR AND ORGANIZATION:	Michael F. Beaudoin, Director Bangor Community College of the University of Maine at Orono Bangor, Maine 04401 (207) 947-6521
FUNDING PERIOD:	July 1, 1976 - June 30, 1977

OBJECTIVES

1) Expand the current bilingual/bicultural Human Services/Gerontology Certificate Program to include two additional areas of high Franco-American population concentration.
2) Enhance the employability and career mobility of an additional 100 unemployed and underemployed Franco-Americans for jobs in community and institutional services to the elderly through effective utilization of bilingual vocational educational resources.
3) Promote and establish bilingual/bicultural vocational education programs in human services through an ongoing consortium of university campuses and cooperating service agencies, thus creating a model program for the entire New England area.

PROCEDURES

The curriculum for the certificate program 1) integrates academic coursework and sponsored field experiences, 2) integrates French and English as appropriate, 3) consists of 28 academic hours, with flexibility for part-time students, 4) recognizes the bilingual/bicultural needs and the life experiences of the older student, 5) provides skills and a credential for immediate employment as well as transferability to 2-year programs within the University. Project participants are provided with a supportive learning environment and with supervised field experience to develop proficiency and confidence in the use of French and English in human services work. Bilingual/bicultural modules will be developed for incorporation into selected courses in order to enable students to work effectively in both languages. Support services will include student counseling, workshops for staff, faculty, and practicum agency supervisors, and student financial aid.

EXPECTED CONTRIBUTION TO EDUCATION

1) Increased employment and/or educational mobility for graduates.
2) Improved services to Maine's French-speaking population.
3) The development of bilingual instructional aids for use by other institutions.

APPLICATION NUMBER: 558AH60068 GRANT NUMBER: G007604117

PROJECT TITLE: New Mexico Technical Vocational School Bilingual Skills Training

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Juan Garcia
New Mexico Technical Vocational School
General Delivery
El Rito, New Mexico 87530 (505) 581-4514

FUNDING PERIOD: July 1, 1976 - June 30, 1977

OBJECTIVES

The primary goal of the project is to assist enrolled students to achieve a functional (survival) grade placement level of 6.9. The second major goal is to provide intensive counseling services in order to 1) instill self worth concepts into the students, 2) encourage experiences in reading skills, and 3) provide supportive services for students in vocational skills training classes.

PROCEDURES

The project expects to serve approximately 100 disadvantaged students at two campuses during the 1-year period. Potential students will be evaluated to determine their grade placement level. Students performing at the 6th grade level or below will be enrolled in a preparatory program of tutoring and counseling in order to help them successfully complete the vocational training classes.

EXPECTED CONTRIBUTION TO EDUCATION

As a result of the project, the 30 percent dropout rate of the New Mexico Technical Vocational School will be substantially reduced.

APPLICATION NUMBER: 558AH60070 GRANT NUMBER: G007603732

PROJECT TITLE: Bilingual Secretarial Training Program

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Albert Gutierrez, Director
Department of Business and Economics
New Mexico Highlands University
Las Vegas, New Mexico 87701

FUNDING PERIOD: July 1, 1976 - June 30, 1977

OBJECTIVES

This two-year program is designed to train bilingual secretaries whose proficiency in both Spanish and English would permit them to function bilingually in the business world.

PROCEDURES

To identify project participants, the program will develop a recruitment package for local presentation. Intake and assessment will be provided by project staff, and students will be placed in the appropriate sequence of courses based on entry skills information. The curriculum will be performance-based, and the first year's curriculum will include a language component in addition to specialized introductory courses in Spanish shorthand and Spanish typewriting. The Spanish-English exposition component is designed to provide the students with intensive extemporaneous reading, writing, and speaking skills. A one-week internship in an all-Spanish-speaking office situation is included in the training program. An advisory committee composed of members of the community will be organized, training for staff will include participation in a bilingual secretarial workshop, and evaluation of student progress will be conducted.

EXPECTED CONTRIBUTION TO EDUCATION

Thirty students whose native language is Spanish will participate in the program for the academic school year 1976-77. It is hoped that the program will gain sufficient community support to be accepted by the Department of Business and Economics as a permanent offering.

APPLICATION NUMBER: 558AH60073 GRANT NUMBER: G007604108

PROJECT TITLE: Viable Vocational Training for Rural Areas - Trilingual

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Carlos Atencio, Chairman
Northern New Mexico Consortium for Rural Education
P. O. Box 611
Cuba, New Mexico 87013

FUNDING PERIOD: September 1976 - August 1977

OBJECTIVES

1) Train paraprofessionals within the Chicano and Navajo communities to become aware of and keep abreast of all job opportunities which become available within the community and to train these people to communicate this information to residents and help them to apply for these jobs.
2) Offer vocational training in power mechanics.
3) Make a series of videotapes in Spanish, Navajo, and English for use as training films.
4) Train local people in the development of native arts and crafts and in the marketing of their products so that they will receive fair market value.

PROCEDURES

1) The paraprofessional job counselors would spend part of their time receiving training cooperatively with the Employment Securities Commission, part of their time becoming familiar with community and business needs, and half of their time compiling job information, disseminating this information, and becoming familiar with the client communities.
2) School and community resources would be used for power mechanics training. Instructors would be brought onsite, and Spanish and Navajo interpreters would be used during all aspects of the training.
3) Filming will be a cooperative venture with KNME-TV.
4) Arts and crafts classes will be offered on the reservation and in the communities. Assistance will be provided by consultants from the business community.

EXPECTED CONTRIBUTION TO EDUCATION

1) Greater awareness of income-producing activities and job opportunities within the local area.
2) Greater knowledge of the factors influencing the market value of goods, assuring people of a fair market price for their products.
3) Less need to migrate in order to make a living.

APPLICATION NUMBER: 558AH60061 GRANT NUMBER: G007603730

PROJECT TITLE: Chinese English Bilingual Para-professional Training Program

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Po S. Yuen, Executive Director
Chinatown Manpower Project Inc.
46 Henry Street
New York, New York 10002

FUNDING PERIOD: September 1, 1976 - August 31, 1977

OBJECTIVES

The objective of the program is to provide Chinese immigrants with intensive skill training, as well as English and bicultural training, so that they can properly adjust to their new environment, obtain jobs, and become productive and respected citizens of their adopted country.

PROCEDURES

Skills to be taught are in the areas of law and accounting. The training program is divided into two cycles per year, each lasting 24 weeks and serving 36 trainees. ESL instruction is designed to improve the students' overall English ability and provide job-related vocabulary and business English. The bicultural course, Comparative Studies in Chinese and American Cultures and People, is offered for two hours each week. Group counseling and job placement services are included in the program.

EXPECTED CONTRIBUTION TO EDUCATION

As a result of this program, trainees will have a better understanding of American business and social systems, and will have acquired skills to assist them in becoming self-supporting and contributing citizens.

APPLICATION NUMBER: 558AH60076 GRANT NUMBER: G007603804

PROJECT TITLE: Bilingual Vocational Training Program to Train Chinese Chefs

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
K.Y. Ai, Director
School of Chinese Studies
China Institute in America
125 East 65th Street
New York, New York 10021 (212) 744-8181

FUNDING PERIOD: July 1, 1976 - June 30, 1977

OBJECTIVES

The purpose of this program is to provide professional culinary skills to Chinese Americans having limited English-speaking ability who are presently unemployed or underemployed. Objectives are to train these individuals to become head chefs and enable them to seek employment anywhere in the United States without being restricted to the various Chinatowns of major cities.

PROCEDURES

The program will enroll 25 trainees in each of four overlapping training periods of 24 weeks, with 40 hours in each week for a total of 960 hours. The first 10 weeks will be spent in ESL instruction and study in restaurant management, cooking, kitchen practice, and related subjects. Incorporated into the ESL program is a special emphasis on culinary terminology and kitchen situations. The next 14 weeks will be field practice at cooperating Chinese restaurants in the New York area. Intensive placement counseling is provided for students as they complete the program. Inservice training for Institute staff will focus on recent developments in bilingual and vocational education at a summer week-long workshop. The program will be evaluated by the following criteria: efficiency, quality, outreach, and placement results.

EXPECTED CONTRIBUTION TO EDUCATION

Over 95 percent of first-year graduates have secured employment as cooks or chefs in both Chinese and American restaurants located all over the country. As a result of this year's program, 100 trainees will acquire skills and English-speaking ability to become productive workers. An innovative ESL text combining survival English and restaurant terminology, along with the program model, will be available for use by other institutions.

APPLICATION NUMBER: 558AH60081 GRANT NUMBER: G007603806

PROJECT TITLE: Bilingual Training in Housing Maintenance & Repair Skills

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Robert J. Rodino, Director
Housing Management & Community Development
Bronx Community College
Office of Continuing Education
University Ave. & W. 181st Street
Bronx, New York 10453

FUNDING PERIOD: June 30, 1976 - May 29, 1977

OBJECTIVES

The primary objectives of the program are to provide persons of limited English-speaking ability an opportunity to acquire the skills needed to qualify for entry-level positions in community housing programs and building maintenance operations or to advance in their present positions. Specifically, the training courses for Italian and Spanish-speaking students are designed to: 1) qualify inservice trainees for job advancement and salary increments, 2) equip preservice trainees with the skills needed to secure employment as handymen, maintenance men, or superintendents, and 3) provide an informal placement service to all preservice trainees.

PROCEDURES

As an expansion of an ongoing program, six courses in maintenance and repair skills, three in Spanish and three in Italian, will be conducted in communities having a large concentration of each language group and at the college's facilities in the Bronx. The program will provide 72 hours of training in the areas of general carpentry, plumbing, heating, electrical repair, and sanitation and pest control for a period of 12 weeks at six hours per week. Each course in ESL instruction will consist of 36 hours, three hours per week for the 12 weeks. The vocabulary and lesson for each ESL session will be keyed to the tools and material used in the corresponding week's skills classes. Counseling for both language groups is conducted by bilingual and bicultural counselors. The counselors provide an initial program orientation for each trainee, visit classrooms, conduct ongoing counseling sessions with each trainee, and provide feedback to the instructors and project director.

EXPECTED CONTRIBUTION TO EDUCATION

As a result of this project, a minimum of 90 inservice and preservice housing personnel would acquire the skills needed to advance in their present positions or better qualify for upcoming positions in community housing programs and building maintenance operation. The bilingual instructional materials in Italian and Spanish will be available for dissemination.

APPLICATION NUMBER: 558AH60090 GRANT NUMBER: G007603735

PROJECT TITLE: New Directions in Vocational Education for Hispanic Americans

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
A. Wayne Overton, Assistant Director
Vocational Education & Extension Board of Nassau County
200 Stonehinge Lane
Carle Place, New York 11514

FUNDING PERIOD: August 2, 1976 - August 1, 1977

OBJECTIVES

The purpose of this program is to provide bilingual vocational training in the occupations of health assistant and auto mechanics, along with related ESL instruction and supportive services, for Hispanic Americans. Specific objectives are to: 1) train 20 persons in the area of health assistant, 2) train 16 persons in the area of auto mechanics, 3) recruit and select persons who will be able to profit from this type of training, 4) provide job placement services for graduates, and 5) provide ESL training and counseling services.

PROCEDURES

The trainees selected are out of school, lack marketable skills, have English skills below third grade level, and have obtained an education in their native country equivalent to a high school graduate. A battery of tests in Spanish will be administered to assess individual needs. The health assistant program meets 4 hours a day, 5 days a week, for 24 weeks in the evening. Clinical experience is provided in local hospitals and medical centers. Training for entry-level employment in auto mechanics will be given 4 hours a day, 5 days a week, for 48 weeks. This course is modular in concept with clearly defined objectives and achievement levels for each module. A key element of the training program, ESL instruction, will be given an hour a day in each program and will focus on the learning of related vocational education materials. A bilingual counselor will assist trainees, and Nassau County's Coordinating Agency for Spanish Americans will develop job placement activities.

EXPECTED CONTRIBUTION TO EDUCATION

As a result of the program the trainees will have marketable vocational skills and sufficient mastery of the English language to compete successfully in the job market.

APPLICATION NUMBER:	558AH60108
GRANT NUMBER:	G007603734
PROJECT TITLE:	Program for Bilingual Secretarial Training
PRINCIPAL INVESTIGATOR AND ORGANIZATION:	Violet Drexler Borough of Manhattan Community College Secretarial Science Department 1633 Broadway New York, New York 10019
FUNDING PERIOD:	September 1, 1976 - June 30, 1977

OBJECTIVES

1) Successfully prepare students for initial job entry as bilingual secretaries.
2) Capitalize on students' abilities in their native language and use these abilities as a valuable asset in career training.
3) Train students in the mechanics of English language and English shorthand.
4) Identify and/or develop instructional materials for postsecondary bilingual secretarial training.
5) Develop staff for teaching in this program.

PROCEDURES

During the course of the 2-year program the following skills will be taught: Spanish shorthand, Spanish typewriting, English language skills, English shorthand, English typewriting, and general secretarial skills. All students entering the program are trained for ESL requirements and are assigned ESL in accordance with their needs. The program has been operational for one year.

EXPECTED CONTRIBUTION TO EDUCATION

Students completing the program will qualify for an entry-level job as a bilingual secretary.

APPLICATION NUMBER: 558AH60112 GRANT NUMBER: G007603735

PROJECT TITLE: Bilingual Training in Preparing Graphics for Reproduction

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
John Samuel Bragin
The American Council for Emigres in the Professions
Bilingual Vocational Training
345 East 46th Street
New York, New York 10017 (212) 687-0520

FUNDING PERIOD: July 1, 1976 - June 30, 1977

OBJECTIVES

The purpose of this program is to assist recent Russian refugees to become econonically self-supporting. Specific objectives are to:

1) Provide training in the entry-level skills of layout and mechanical preparation required for employment as subprofessionals in the field of commercial graphic art design for those who have an art-related background.
2) Instruct this group in intensive English-language training especially designed for their future vocational work needs.
3) Provide supportive services in personal and career counseling and job placement.
4) Develop curriculum and products adaptable for similar training programs.

PROCEDURES

The program will be implemented in conjunction with The Foundation for Urban Cultural Development, Inc. A bilingual/bicultural (Russian/English) staff of ESL instructors, vocational skills trainers, and counselors will be recruited and given 15 hours of inservice training. The project will provide 45 hours of bilingual training in preparing graphics for reproduction in a course meeting weekly for 15 weeks. Sixty hours of job-specific ESL instruction will also be provided. The final three weeks of training will incorporate an internship component utilizing work assignments generated from cooperating organizations. The project will serve 20 trainees in each of two 15-week cycles and will supply necessary counseling and placement services. A testing program and both formative and summative evaluation will be conducted.

EXPECTED CONTRIBUTION TO EDUCATION

Forty refugees will have individualized portfolios that objectify their accomplishments and will be able to compete for jobs in the graphic arts field. The following products will be available for dissemination: 1) A bilingual curriculum in preparing graphics for reproduction with both an ESL and skills instruction component; 2) the first bilingual Russian/English *Graphic Design Lexicon*; and 3) the first bilingual *Basic Skills Outline in Preparing Graphics for Printing*.

APPLICATION NUMBER: 558AH60047 GRANT NUMBER: G007603975

PROJECT TITLE: Bilingual Mental Health Technologist Training Program

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Charles Fortney, Director
Social and Behavioral Sciences
Mary College
Apple Creek Road
Bismarck, North Dakota 58501 (701) 255-4681

FUNDING PERIOD: July 1, 1976 - June 30, 1979

OBJECTIVES

The two-year program represents an effort to reduce the shortage of qualified Indian personnel in the mental health field. It is anticipated that graduates of the program will have developed the ability to:

1) Understand both general and specific types of social interactive patterns within American Indian cultures.
2) Identify and treat persons who may be experiencing various forms of personal and mental health problems.
3) Organize and coordinate group programs for alcoholics and drug addicts in reservation communities and make referrals to the proper agencies when necessary.
4) Reduce social and personal disorganization among American Indians through the employment of individual and family counseling.
5) Assist needy Indians in securing services with appropriate agencies.
6) Promote and develop educational programs directed toward positive mental health practices within the reservation community.

PROCEDURES

Essentially, the program is academically-oriented toward coursework in the areas of psychology, sociology, social work, Indian studies, and English. Incorporated into the program is a bilingual directive to provide limited-English-oriented trainees with a better understanding of the language, which is a prerequisite for field work in a mental health care system. The program is also designed to familiarize Indian personnel with the salient features of many Plains Indian cultural and language systems. Involvement with area-wide social service agencies that deal with mental health problems will provide practical experience.

EXPECTED CONTRIBUTION TO EDUCATION

1) Improved mental health care for residents of North Dakota's Indian reservations.
2) A minimum of 45 Native Americans will be qualified to respond to mental health needs, and will become eligible for employment advancement.
3) The development of a model multi-ethnic vocational training program for other schools and institutions.

APPLICATION NUMBER: 558AH60062 GRANT NUMBER: G007603731

PROJECT TITLE: Bilingual Vocational Training

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
J. R. Gililland, Superintendent
Canadian Valley Area Vo-Tech School, District #6
P. O. Box 579
El Reno, Oklahoma 73036

FUNDING PERIOD: July 1, 1976 - June 30, 1977

OBJECTIVES

The primary objective of the program is to provide an opportunity to broaden occupational aspirations and abilities for incarcerated individuals of Mexican American origin through the use of two bilingual vocational training programs. The secondary objective is to develop community-based support to assist the incarcerated individual of Mexican American origin in obtaining meaningful employment upon release.

PROCEDURES

Separate programs in food service and auto mechanics will be offered. Each training period will average four months, with an anticipated total daily enrollment of 18-24 students. Through the support of two bilingual academic and related trades instructors presently employed by the Federal Correctional Institution, the students should gradually overcome the language barrier as related to ESL and development of vocational skills needed for successful employment. The English and Spanish language are to be used interchangeably in the shop and classroom for the purpose of complementing each other. In this manner, the student can acquire a given amount of proficiency in the primary as well as secondary language.

EXPECTED CONTRIBUTION TO EDUCATION

Approximately 60-75 students will develop vocational competency enabling them to compete successfully in the job market with community-based support for job and socioeconomic assistance.

APPLICATION NUMBER: 558AH60003 GRANT NUMBER: G007603974

PROJECT TITLE: Vocational Education - Bilingual Training

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Arnoldo Cantu, Executive Director
SER/Hidalgo Jobs for Progress, Inc.
Bilingual Vocational Training
P. O. Box 72
San Juan, Texas 78589 (512) 787-5541

FUNDING PERIOD: July 5, 1976 - July 4, 1977

OBJECTIVES

The purpose of the project is to offer career opportunities to 220 Spanish-speaking persons by providing vocational training for entry-level employment in six occupational areas, along with supportive services to facilitate successful program completion.

PROCEDURES

The four program components are:

1) Vocational training in bilingual secretarial training, bookkeeping, office machine repair, auto body repair, meatcutting, and butchering.
2) ESL instruction by two specialists to teach the job-related vocabulary and basic language skills that will enable the participants to function on the job for which they are being trained. A language laboratory of tapes and cassettes will be developed by the ESL staff.
3) Guidance and counseling services by bilingual counselors to assist participants and their families. Each counselor will schedule at least two sessions with every participant assigned to him. An incentive training allowance will be paid to the trainees to help relieve any financial burden incurred by project participation.

EXPECTED CONTRIBUTION TO EDUCATION

The program will directly impact the unemployed and underemployed population of Hidalgo County with limited English-speaking ability. Replicable innovative bilingual methodologies and curricula will be developed and made available to other organizations working with bilingual vocational training programs.

APPLICATION NUMBER: 558AH60056 GRANT NUMBER: G007603976

PROJECT TITLE: Bilingual Vocational Training Program for Emergency Medical Technicians

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Barbara J. Cramer, Director
School of Health Care Services
Institute of Health Sciences
Texas Woman's University
Denton, Texas 76204 (817) 387-0312

FUNDING PERIOD: July 1, 1976 - June 30, 1977

OBJECTIVES

The purpose of this program is to train 20 bilingual emergency medical technicians (EMTs) who will be qualified to take the State of Texas EMT examination. The program will emphasize bilingual medical terminology, English as a second language, and knowledge and skills in basic emergency medical technology.

PROCEDURES

Although intended primarily for Mexican Americans, all Spanish-speaking members of the Dallas community will be eligible for the program, and recruitment will involve various local agencies. The program includes 80 hours of classroom instruction, 40 hours of in-hospital training, and 108 hours of ESL instruction. Staff development activities will be conducted throughout the school year, and faculty will be involved in recruitment, the teaching/learning process, placement, counseling, remedial training, and evaluation.

EXPECTED CONTRIBUTION TO EDUCATION

The program will facilitate the adjustment of Mexican Americans to the urban setting and will help them become functional members of society. It will also serve as a model for bilingual EMT training programs that can be used in other institutions.

APPLICATION NUMBER: 558AH60125   GRANT NUMBER: G007603736

PROJECT TITLE: Implementation of Bilingual Vocational Training

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Ruben Ochoa, Director
Skills Center
El Paso Community College
6601 Dyer Street
El Paso, Texas 79904 (915) 566-6781

FUNDING PERIOD: July 1, 1976 - June 30, 1977

OBJECTIVES

The purpose of this project is to continue to offer bilingual vocational training to adults with limited English-speaking ability. Objectives are to impart the necessary work knowledge and develop the occupational skills required for entry into employment for as many individuals as can benefit from the experience. The primary language of those individuals identified and recruited will be Spanish, but there will also be some Vietnamese and Cambodian resettlement aliens attending classes.

PROCEDURES

The types of programs offered include sewing machine operator, sewing machine repair, and radio and television repair. Training is planned on a cluster concept with open entry/open exit scheduling. Student personnel services will be provided in the areas of intake and assessment, testing and counseling, job-related English classes, pre-employment preparation, and job placement. Financial assistance will be available to economically disadvantaged students. Local agencies will assist in recruitment, and an advisory committee will be appointed for each of the vocational programs. Both formative and summative evaluation activities will be conducted, and results will be analyzed by staff and external evaluators.

EXPECTED CONTRIBUTION TO EDUCATION

As a result of the program, individuals with limited English-speaking ability will acquire the knowledge and skills needed to function in the mainstream of society.

APPLICATION NUMBER: 558AH60141 GRANT NUMBER: G007603738

PROJECT TITLE: Bilingual Vocational Training Program

PRINCIPAL INVESTIGATOR AND ORGANIZATION:
Ignacio R. Mata, Superintendent
Crystal City Independent School District
805 East Crockett Street
Crystal City, Texas 78839 (512) 374-2353

FUNDING PERIOD: July 1, 1976 - June 30, 1979

OBJECTIVES

The objectives of the program are to provide bilingual vocational training for 50 students and to successfully place them in jobs. The school district serves a large population of unemployed and underemployed Mexican American people.

PROCEDURES

Training will be offered to 25 students in each of the occupational clusters of printing and clerical skills. The program will be scheduled in the late afternoon and early evening, five days a week for 40 weeks. Project staff will include a project director, liaison officer, and academic and vocational instructors. Assistance will be provided by a bilingual community council of vocational education and a bilingual technical advisory committee. In addition, one or more consultants will conduct inservice education and monitoring of both curriculum development and instruction. The trainees will be screened for language proficiency, educational background, vocational aptitude, and personal need. At the end of the year, project staff will provide placement and followup services for the trainees.

EXPECTED CONTRIBUTION TO EDUCATION

Training and employment assistance will be provided for the 50 selected students. A curriculum guide and instructional materials will be produced for replication in similar projects.

INDEXES

APPLICATION NUMBER INDEX

Page

496AH60003 221

496AH60004 222

496AH60007 220

496AH60010 218

498AH60002 141

498AH60004 26

498AH60011 56

498AH60014 64

498AH60017 96

498AH60019 15

498AH60022 72

498AH60026 79

498AH60027 21

498AH60028 137

498AH60030 68

498AH60032 9

498AH60037 49

498AH60038 80

498AH60040 109

498AH60041 81

498AH60049 110

498AH60051 84

498AH60052 111

Page

498AH60053 94

498AH60054 16

498AH60056 92

498AH60057 83

498AH60059 12

498AH60060 43

498AH60061 51

498AH60062 95

498AH60066 52

498AH60074 101

498AH60081 45

498AH60082 74

498AH60084 75

498AH60088 103

498AH60090 10

498AH60094 54

498AH60102 50

498AH60107 113

498AH60108 24

498AH60113 58

498AH60114 63

498AH60116 44

498AH60118 100

	Page
498AH60119	22
498AH60124	112
498AH60141	11
498AH60142	40
498AH60146	41
498AH60151	76
498AH60152	108
498AH60153	85
498AH60157	33
498AH60165	53
498AH60166	93
498AH60177	27
498AH60178	28
498AH60180	102
498AH60183	67
498AH60184	115
498AH60189	46
498AH60191	39
498AH60193	104
498AH60194	105
498AH60198	73
498AH60199	14
498AH60200	59
498AH60201	48
498AH60203	60

	Page
498AH60205	57
498AH60217	106
498AH60218	18
498AH60219	61
498AH60220	107
498AH60223	66
498AH60224	99
498AH60228	98
498AH60229	82
498AH60234	114
498AH60237	19
498AH60238	77
498AH60239	55
498AH60246	65
498AH60248	25
498AH60252	62
498AH60258	78
498AH60261	37
498AH60264	47
498AH60269	29
498AH60276	86
498AH60278	20
498AH60279	13
498AH60282	34
498AH60283	89

Page
498AH60284 38
498AH60290 71
498AH60292 35
498AH60293 90
498AH60301 23
498AH60316 36
498AH60318 42
498AH60328 97
498AH60330 17
498AH60332 91
498AH60354 136
498AH60355 119
498AH60356 129
498AH60364 142
498AH60365 120
498AH60366 139
498AH60367 121
498AH60373 122
498AH60374 123
498AH60375 124
498AH60376 135
498AH60377 130
498AH60378 134
498AH60379 125
498AH60380 131

Page
498AH60413 132
498AH60414 140
502A150001D 208
502A150002D 206
502A150003D 211
502A25001 209
502A25002 210
502A25003 213
502A550010 207
502A959992 203
502A959994 212
502A950014 204
502A950015 205
502AH60001 188
502AH60002 155
502AH60005 160
502AH60010 191
502AH60012 146
502AH60013 164
502AH60016 149
502AH60017 171
502AH60019 150
502AH60020 169
502AH60021 153
502AH60022 152

Page
502AH60025 166
502AH60027 181
502AH60030 159
502AH60038 147
502AH60039 158
502AH60040 162
502AH60042 173
502AH60047 156
502AH60050 168
502AH60053 190
502AH60059 189
502AH60060 151
502AH60061 182
502AH60063 174
502AH60066 145
502AH60067 187
502AH60069 180
502AH60070 154
502AH60076 165
502AH60077 167
502AH60086 183
502AH60087 148
502AH60088 177
502AH60089 194
502AH60090 163

Page
502AH60094 179
502AH60100 157
502AH60103 192
502AH60104 178
502AH60105 170
502AH60111 193
502AH60118 161
502AH60119 172
558AH60003 251
558AH60023 239
558AH60026 234
558AH60044 235
558AH60047 249
558AH60056 252
558AH60061 243
558AH60062 250
558AH60068 240
558AH60070 241
558AH60073 242
558AH60076 244
558AH60081 245
558AH60090 246
558AH60108 247
558AH60112 248
558AH60125 253

Page
558AH60138 236
558AH60141 254
558AH60160 237
558AH60163 233
558AH60164 238
995AH50106 138
F4003VW 199
F4007VW 197
F5001VW 198
V274PR1B 200

PRINCIPAL INVESTIGATOR INDEX

Page
Abeson, Alan 114
Abram, Robert E. 106
Adam, Frank W. 55
Ai, K. Y. 244
Alexander, Kern 129
Anderson, Marcia 40
Anderson, Ronald 94
Atencio, Carlos 242
Bagley, Roy 157
Banathy, Bela H. 35
Baratz, Joan C. 120
Barlow, Melvin L. 11
Barnes, Bill 187
Bavier, Thomas N. 38
Beaudoin, Michael F. 97,239
Becket, James 217
Bennett, Lois W. 37
Berry, Arthur O. 12
Bert, C. Virginia . . . 73,197
Best, Kenneth G. 154
Bickimer, David A. 210
Blaschke, Charles L. 39
Boakes, William H. 234
Page
Boettcher, Julie N. 16
Boyer, Harry J. 79
Bragin, John Samuel 248
Bryant, Donald 203
Bushnell, David S. 124
Cameron, Walter A. 22
Campbell, Daniel H. 192
Cantu, Arnoldo 251
Cardish, Edna C. 83
Carlson, Clayton 182
Carpenter, Bruce 78
Casterline, Larry 59
Clark, Donald L. 112
Clark, Russell 74
Cohen, James S. 92
Cohen, Stanley B. 167
Constance, John 229
Cramer, Barbara J. 252
Crowley, Carol Berry 159
Cunningham, Paul R. 10
Dahl, Peter R. 90
Danford, Jan 80
Daniels, William 222

Page
Dasher, James 179
Datcher, Ellen F. 148
Davis, Jack 134
Davis, J. Clark 162
DiLego, Pasquale 211
Dillon, William 27
Dole, David 146
Douglass, Rebecca 218,228
Drewes, Donald W. 103
Drexler, Violet 247
Drier, Harry N. 60
Dueitt, Sue 52
Dunham, Daniel B. 131
Dunn, James 223
Edington, Everett 56
Elliott, Michael J. 174
Ellis, Mary L. 98
Ely, Vivien K. 229
Eshelby, Don 58
Evans, Rupert N. 95
Faust, John R. 81
Feldman, Marvin 136
Fernandez, Edward 163
Fielding, Marvin R. 53
Findlay, Donald C. 138

Page
Fluck, Bryan V. 62
Ford, Jack D. 164
Fortney, Charles 249
Fowler, Robert E. 93
Frantz, Nevin R. 72
Freedman, Ruth 49
Fritchley, Ronald L. . . . 149
Furtado, Lorraine 61
Garcia, Juan 240
Garrison, James M. 160
Gibson, Larry 130
Gibson, Robert B. 233
Gibson, Robert L. 42
Gililland, J. R. 250
Gilman, J. M. 177
Gordon, Alice 228
Greenwood, Kathryn 20
Gualdoni, Jack 76
Gutierrez, Albert 241
Hall, J. F. 168
Handley, Richard 36
Hanratty, Donald J. 189
Harb, Easa 204
Hartz, John D. 67
Harwood, R. Frank 15

Page

Henderson, Thomas R. 237

Hoch, Harry 21

Hodes, Lance 132

Hornback, Edgar E. 77

Hughes, James H. 104

Hull, Daniel M. 85,226

Humphrey, Ralph 165

Huss, Janet 153

Hutkin, Ronald M. 16

Jackson, Frances 190

Jarmer, Gary E. 45

Jenks, Houston C. 156

Jensen, Arthur K. 84

Johnson, Thera 170

Kane, Roslyn D. . . . 25,66,142

Kaufman, Jacob J. . . . 110,111

Keller, Louise J. 37

Kelly, Joseph 220

Kerr, Sam W. 191

King, Joe, Jr. 51

King, Lourdes Miranda 125

Klaiber, Susan E. 208

Kohn, Donald P. 227

Krumboltz, John D. 34

Lafferty, Bill R. 169

Page

Landis, Jeanne T. 89

Latham, Gail 199

Lee, Arthur M. 119

Lee, Thomas L. 178

Lehto, Harold T. 198

Looney, Era F. 113

Lulos, George S., Jr. 82

Luntey, Harold 193

Lynch, Richard L. 24,227

Magisos, Joel H. 137

Martin, Michael 108

Mata, Ignacio R. 254

Matthews, Paul 151

McCage, Ronald D. 41,152

McClay, David R. 139

McClellan, L. Dean 96

McClurg, Ronald 44

McCune, Shirley 122

Miller, Geoffrey C. 47

Miller, Harry 207

Milne, Bruce G. 225

Mink, Oscar G. 65

Mizuba, Kiyoto 150

Montgomery, M. Lee 140

Moore, Charles G. 172

Page
Moya, José Lema 68,200
Murphy, E. B. 155
Nelson, William J. 54
Nuttall, Ronald L. 99
Nystrom, Dennis C. 96
Ochoa, Ruben 253
Olson, Lawrence S. 57
Omura, George Y. 75
Overton, A. Wayne 246
Parker, L. Allen 13
Patterson, S. Douglas . . . 9
Patton, Bob 221
Pershing, James A. . . . . 10[illegible]
Persons, E. A. 14
Phillips, J. Earle, Jr. . . 171
Platero, Dillon 71
Pope, Wayne 145
Post, John 206
Ragster, Albert 213
Rall, Clifford L. 46
Ramarui, David 212
Randall, Kent 86
Rask, Michael L. 194
Ratcliff, James L. 26
Reece, Barry L. 24

Page
Rice, Eric 105
Rodino, Robert J. 245
Russell, David 224
Russell, Earl 19
Ryan, Kay D., Jr. 17
Santoro, Frank M. . . . 63,181
Semick, Georgette 121
Shill, James F. 100
Smith, John 29
Smith, Philip D., Jr. . . 109
Spencer, Carl 161
Stefan, Ann 135
Steger, Gerald 166
Stock, William E. 50
Stover, Keith 64
Suppes, Patrick 33
Svore, Jerome 133
Swanson, G. I. 14
Tangman, Ruth 127,128
Tarleton, Gail 126
Taylor, John H. 23
Thiel, Kurt R. 173
Thompson, Loren J. 147
Tindall, Lloyd W. 115
Todd, Ronald D. 102

	Page
Tomlinson, Robert M.	95
Tuchscherer, Jerry	180
Turpin, Robert A., Jr. . . .	141
Upton, Anne	205
Van Hook, Warren K.	123
Van Zweden, Adrian	209
Vetter, Louise	18
Wall, James	219
Weaver, Charles E.	48
Weissman, Fredric	235
Welty, T. A.	28
Whitson, Charles	107
Wiederanders, Mark	91
Williams, James E.	188
Willis, Larry	43
Wilson, James W.	158
Wright, Robert A.	238
Yormark, Ben A.	183
Yuen, Po S.	243
Zachariadis, Chris	236

STATE INDEX

Alabama, 9, 145

Alaska, 177, 233

Arizona, 71, 119, 178

Arkansas, 10, 179

California, 11, 33, 34, 35, 36, 89, 90, 91, 203, 204, 205, 217, 223, 224, 234, 235, 236, 237, 238

Colorado, 37, 187

Connecticut, 38, 92, 146

Delaware, 72, 147

District of Columbia, 39, 120, 121, 122, 123, 124, 125, 126, 127, 128, 148, 229

Florida, 73, 93, 129, 197

Georgia, 74, 130, 149

Hawaii, 75, 150

Illinois, 40, 41, 76, 94, 95, 152, 218, 228

Idaho, 151

Indiana, 42, 77, 188

Iowa, 43, 44, 153

Kansas, 45, 154

Kentucky, 78, 96, 155

Louisiana, 79, 156

Maine, 12, 97, 157, 239

Maryland, 46, 98, 131, 132, 158

Massachusetts, 13, 47, 99, 206, 228

Michigan, 48, 80, 159, 207

Minnesota, 14, 49, 50, 198

Mississippi, 15, 51, 100, 189, 219

Missouri, 52, 53, 101, 133, 160

Montana, 54, 190

Nebraska, 16, 161

Nevada, 17, 134, 162

New Hampshire, 81, 208

New Jersey, 55, 82, 135, 209, 220

New Mexico, 56, 163, 240, 241. 242

New York, 57, 83, 102, 136, 210, 243, 244, 245, 246, 247, 248

North Carolina, 103, 104, 105, 199

North Dakota, 58, 180, 249

Ohio, 18, 19, 59, 60, 61, 106, 107, 137, 138, 164

Oklahoma, 20, 191, 221, 250

Oregon, 21, 108, 165

Pennsylvania, 62, 109, 110, 111, 139, 166, 167

Rhode Island, 63, 181

South Carolina, 84, 140, 168

South Dakota, 64, 182, 225

Tennessee, 22, 192

Texas, 65, 85, 112, 169, 226, 251, 252, 253, 254

Utah, 86, 170

Vermont, 23, 211

Virginia, 24, 25, 66, 113, 114, 141, 142, 171, 227, 229

Washington, 26, 183, 222

West Virginia, 27, 28, 172

Wisconsin, 67, 115, 173

Wyoming, 29, 174

American Samoa, 193

Guam, 194

Puerto Rico, 68, 200

Mariana Islands, 212

Virgin Islands, 213

U.S. GOVERNMENT PRINTING OFFICE: 1977-[illegible]